INFORMAZIONI PERSONALI



Simone Silvestro

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Sesso Maschile | Data di nascita 07/10/1978 | Nazionalità Italiana
Affiliazioni 1. INAF Osservatorio Astronomico di Capodimonte, Via Moiariello 16, Napoli (Italia)
2. SETI Institute, Carl Sagan Center, 189 N. Bernardo Ave., 90143, Mt. View (USA)

OCCUPAZIONE DESIDERATA

Primo ricercatore, Secondo livello professionale, Raggruppamento Scientifico Nazionale 3

OCCUPAZIONE ATTUALE

Ricercatore, Terzo livello presso INAF Osservatorio Astronomico di Capodimonte (Napoli)

COORD./RESP. PROGETTI RICERCA SCIENTIFICO/TECN.

Gennaio 2023

PI progetto Europlanet 2024 Research Infrastructure: Aeolian ripples development under Martian atmospheric conditions

INAF OACN/Ben Gurion University –Israel/Aaerhus University - Denmark

- Concepimento esperimento, raccolta e analisi dat, lavoro in lab. – wind tunnel (1 settimana)

Novembre 2021 - alla data attuale

PI - Guest Investigator for the ExoMars Mission: Characterize the Climate of Mars Through the Study of the Aeolian Environment at Oxia Planum

INAF OACN/ESA/OPEN UNIVERSITY - UK/IKI – RU

- Analisi/paragone dati orbitali ed in situ da rover (camere) e meteo (surface platform) - **PI progetto, chiamata ESA competitiva** - https://www.cosmos.esa.int/web/call-for-exomars-2022

Gennaio 2020

PI progetto Europlanet 2024 Research Infrastructure: Understanding large aeolian ripples on Mars through wind tunnel experiments

INAF OACN/Ben Gurion University – Israel/Aarhus University - Denmark

Concepimento esperimento, raccolta e analisi dati, lavoro in lab.– wind tunnel (1 settimana)

Gennaio 2019

PI progetto Europlanet 2020 Research Infrastructure: Understanding the nature of the Martian large ripples through the study of potential analogues in Morocco

INAF OACN/Università di Coimbra (Portogallo)

- Lavoro sul campo (3 settimane), concepimento esperimento, raccolta e analisi dati

Gennaio 2017

PI progetto Europlanet 2020 Research Infrastructure: Aeolian bedform dynamics on Earth and Mars. A terrestrial analogue approach

INAF OACN/Università di Coimbra (Portogallo)

Lavoro sul campo (2 settimane), concepimento esperimento, raccolta e analisi dati

Novembre 2010 - Novembre 2013 (34 mesi)

Science Principal Investigator - NASA Mars Data Analysis Program: Dune morphology and atmospheric models, implication for present-day Martian aeolian activity

SETI Institute, 339 N. Bernardo Ave., Mountain View (CA), 94043 (USA)

- **Scrittura del proposal**, consulenza scientifica, produzione e analisi dati, presentazione a convegni, scrittura articoli scientifici

RESPONSABILITÀ WP E/O TASK PROGETTI

Novembre 2022 - alla data attuale

Responsabile work package 1500-12 del progetto PNRR Earth Mars & Moon (EMM): A Martian facility for sand and dust mobilization phenomena: planetary images, laboratory experiments and terrestrial analogues

INAF OACN/CNR

- Implementazione facility per studio e analisi immagini orbitali in combinazione con modelli atmosferici, settaggio workstation analisi dati orbitali, supporto al CNR per modelling atmosferico Marziano, selezione aree di prova

Settembre 2021 – alla data attuale (progetto di durata triennale)

Co-Investigator - NASA Mars Data Analysis Program: Seasonal, annual, and multidirectional sand flux trends related to global or regional forcing factors

INAF OACN/SETI Institute/PSI (PI M. Chojnacki PSI)

- Selezione aree di studio, produzione e analisi dati, presentazione risultati

Settembre 2020 – alla data attuale (progetto di durata triennale)

Co-Investigator - NASA Mars Data Analysis Program: Characterizing the Dynamic Activity of Martian Mega-ripples and Transverse Aeolian Ridges

INAF OACN/SETI Institute/PSI (PI M.Chojnacki PSI)

- Selezione aree di studio, produzione e analisi dati, presentazione risultati

Novembre 2019 – Novembre 2020 (1 anno)

Co-Investigator - NASA Mars Data Analysis Program: The enigmatic Transverse Aeolian Ridges (TARs) caught in the act of pattern evolution

INAF OACN/SETI Institute (PI Lori Fenton SETI)

- Selezione aree di studio, produzione e analisi dati, presentazione risultati

Dicembre 2017 – Dicembre 2018

Co-Investigator (assegno di ricerca): Progetto Micro-MED, a compact dust detector for Martian airborne dust investigation - ExoMars 2020

INAF OACN (PI Francesca Esposito)

- Contributo alla scrittura di proposal e documentazione, giustificazione e base scientifica del progetto, analisi dati potenziali siti atterraggio ExoMars 2020

Dicembre 2017 - alla data attuale

Responsabile targeting: Colour and Stereo Surface Imaging System (CaSSIS), processi eolici supeficiali - ExoMars 2016 – Trace Gas Orbiter (TGO)

INAF OACN

- Selezione dei target scientifici dello strumento, analisi dati

Ottobre 2017 - alla data attuale

Partecipating scientist: Colour and Stereo Surface Imaging System (CaSSIS) - ExoMars 2016 – Trace Gas Orbiter (TGO)

INAF OACN

- Analisi dati, scrittura articoli scientifici

Aprile 2016 – Marzo 2019

Collaboratore - NASA Mars Data Analysis Program: Studies of Dune Dynamics and Temporal Flux Variations on Mars

INAF OACN/SETI Institute/APL (PI N.T. Bridges)

- Contributo alla scrittura di proposal, analisi dati

Maggio 2014 – Novembre 2017 (42 mesi)

Co-Investigator (assegno di ricerca): Progetto DREAMS, Dust Characterization, Risk Assessment and Environment Analyser on the Martian Surface - ExoMars 2016

INAF OACN (PI Francesca Esposito)

- Mappatura geologica (morfologie eoliche) del sito di atterraggio di Schiaparelli, analisi dati, stesura timeline strumento

Maggio 2016 – Maggio 2017

Consulente scientifico: Caratterizzazione del suolo nei potenziali siti di atterraggio della sonda ExoMars 2020

INAF OACN/Laboratoire de Sciences de la Terre, Université Lyon 1 - France/ESA

- Scrittura proposal, consulenza scientifica, analisi dati

Febbraio 2014 – Maggio 2014

Consulente scientifico: Progetto DREAMS, ExoMars 2016

INAF OACN (PI Francesca Esposito)

- Studio morfologie eoliche del sito di atterraggio di Schiaparelli, analisi dati

Gennaio 2012 – Gennaio 2015

Collaboratore - NASA Mars Data Analysis Program: Analysis of global and local trends in aeolian bedform mobility on Mars

SETI Institute/PSI (PI M. Banks PSI)

- Scrittura proposal, consulenza scientifica, analisi dati

Gennaio 2012 – Gennaio 2016

Collaboratore - NASA Mars Data Analysis Program: Advanced change detection studies of Martian dunes

SETI Institute/APL/CALTECH (PI N.T. Bridges APL)

- Consulenza scientifica, analisi dati

Gennaio 2010 - Ottobre 2010

Consulente scientifico: Environmental Terrain Support Analysis Project (ETSA) - ExoMars 2016

International Research School of Planetary Science, Viale Pindaro 42, 65127, Pescara, Italia

- Settaggio workstation e installazione software dedicati, analisi, produzione e validazione modelli 3D del terreno Marziano (DTM) nel sito di atterraggio di ExoMars 2016 (Meridiani Planum)

Agosto 2009 - Dicembre 2009

Contratto di collaborazione: Produzione di carte geologiche di Marte con particolare riferimento ai depositi eolici

International Research School of Planetary Science

- Analisi morfologica depositi eolici Marziani e analisi cambiamenti da immagini ad alta risoluzione (Nili Patera)

PARTECIPAZIONE A TEAM DI RICERCA

Internazionali & Nazionali

Ruolo PI-Science PI

- 2023: **Europlanet 2024 Research Infrastructure**, Aeolian ripples development under Martian atmospheric conditions
- 2020: **Europlanet 2024 Research Infrastructure**, Understanding large aeolian ripples on Mars through wind tunnel experiments
- 2019: **Europlanet 2020 Research Infrastructure**, Understanding the nature of the Martian large ripples through the study of potential analogues in Morocco
- 2017: **Europlanet 2020 Research Infrastructure**, Aeolian bedform dynamics on Earth and Mars. A terrestrial analogue approach
- 2010: **NASA Mars Data Analysis Program**, Dune morphology and atmospheric models, implication for present-day Martian aeolian activity

Ruolo Co-I

- 2020: **PNRR Earth Mars & Moon (EMM)**, A Martian facility for sand and dust mobilization phenomena: planetary images, laboratory experiments and terrestrial analogues
- 2021 (3 anni): **NASA Mars Data Analysis Program**, Seasonal, annual, and multidirectional sand flux trends related to global or regional forcing factors (PI M. Chojnacki PSI)
- 2020 (3 anni): **NASA Mars Data Analysis Program**, Characterizing the Dynamic Activity of Martian Mega-ripples and Transverse Aeolian Ridges (PI M. Chojnacki PSI)
- 2019 (1 anno): **NASA Mars Data Analysis Program**, The enigmatic Transverse Aeolian Ridges (TARs) caught in the act of pattern evolution (PI L.K. Fenton SETI)
- 2017 (1 anno): **ESA ExoMars 2022**, Progetto Micro-MED, a compact dust detector for Martian airborne dust investigation (PI F. Esposito INAF)
- 2014 (3 anni): **ESA ExoMars 2016**, Progetto DREAMS, Dust Characterization, Risk Assessment and Environment Analyser on the Martian Surface (PI F. Esposito INAF)

Guest Investigator

- 2022: **ESA ExoMars 2022**, Characterize the Climate of Mars Through the Study of the Aeolian Environment at Oxia Planum

Partecipating Scientist

- 2017: **ESA ExoMars 2016**, Colour and Stereo Surface Imaging System (CaSSIS) Trace Gas Orbiter (TGO)

Collaboratore

- 2016: **ESA**, Caratterizzazione del suolo nei 4 potenziali siti di atterraggio della sonda ExoMars 2020
- 2016 (3 anni): **NASA Mars Data Analysis Program**, Studies of Dune Dynamics and Temporal Flux Variations on Mars (PI N.T. Bridges)
- 2012 (3 anni): **NASA Mars Data Analysis Program**, Analysis of global and local trends in aeolian bedform mobility on Mars (PI M. Banks PSI)
- 2012 (4 anni): **NASA Mars Data Analysis Program**, Advanced change detection studies of Martian dunes (PI N.T. Bridges)
- 2010: **ExoMars 2016**, Environmental Terrain Support Analysis Project (ETSA)

Partecipazione in missioni spaziali

In corso

- ESA ExoMars Rover (RSOWG), Guest Investigator
- ESA ExoMars 2016, Colour and Stereo Surface Imaging System (CaSSIS) Trace Gas Orbiter (TGO)

Passate

- ESA ExoMars 2016 lander, DREAMS Co-I

COMITATI & PEER REVIEW

Proposal

- 2022: **Revisore esterno, UK Space Agency Exploration Science Funding Call**
- 2017: **Membro pannello revisori, NASA Solar System Working Group**, subpanel "Surface and Atmospheric interactions", 4-9 giugno, Boston (USA)
- 2016: **Revisore esterno, American National Science Foundation**
- 2012: **Membro pannello revisori, NASA Mars Fundamental Research Program**, 15-19 Ottobre, Washington (USA)

Progetti

- 2020 ad oggi: **Membro dell'advisory board**, progetto inTime (In-Situ Instrument for Mars and Earth dating applications), Horizon 2020 Marie Skłodowska-Curie actions Research and Innovation Staff Exchange (RISE)

Studenti PhD

- 2018: **Membro commissione di valutazione (invited),** dottorato di Carin Cornwall, ULSTER University, Tesi di dottorato "Aeolian Dynamics on Mars"

Editorial board

- 2021: **Guest Editor** numero speciale "Physics and Geomorphology of Sand Ripples on Earth and in the Solar System" della rivista Frontiers in Earth Science, https://www.frontiersin.org/research-topics/15618/physics-and-geomorphology-of-sand-ripples-on-earth-and-in-the-solar-system#overview
- 2020: **Guest Editor** numero speciale "Dune Migration on Mars" sulla rivista MDPI Geoscience, https://www.mdpi.com/journal/geosciences/special_issues/dune_migration
- 2018: **Guest Editor** numero speciale dedicato ai risultati del 5th International Planetary Dunes Workshop - St. George, UT (USA) della rivista Journal of Geophysical Research (Planet), https://agupubs.onlinelibrary.wiley.com/doi/toc/10.1002/(ISSN)2169-9100.DUNEWKSHP1

Referaggio articoli

- 2010 - 2023: Revisore per **Science**, Geophysical Research Letters, Journal of Geophysical Research, Icarus, Aeolian Research, Earth Surface Processes and Landforms

RUOLI IN CONFERENZE SCIENTIFICHE

Chair

- 2023: **Chairman**, XVIII Congresso Nazionale di Scienze Planetarie, Sessione Marte, 6-10 Febbraio, Perugia
- 2022: **Chairman**, XVII Congresso Nazionale di Scienze Planetarie, Sessione Marte, 20-24 Giugno, Napoli
- 2018: **Chairman** (**invited**), 10th International Conference on Aeolian Research, 25-29 Giugno, Bordeaux (Fr), sessione "Planetary aeolian research", revisione e selezione abstract
- 2017: **Chairman**, 5th Int. Planetary Dunes Workshop, 16-19 Maggio, St. George (UT), USA, sessione "Dune morphology and response to wind regime", revisione e selezione abstract

Organizzazione

- 2022: **LOC member**, XVII Congresso Nazionale di Scienze Planetarie, Sessione Marte, 20-24 Giugno, Napoli
- 2022: **SOC member**, European Geophysical Union (EGU) General Assembly, Sessione Planetary Aeolian Processes and Landforms, 23-27 Maggio, Vienna, Austria
- 2021: **SOC member**, European Geophysical Union (EGU) General Assembly, Sessione Flow and bedform dynamics on Earth and Mars, 4-8 Maggio
- 2018: **SOC member**, 10th International Conference on Aeolian Research, 25-29 Giugno, Bordeaux (Fr), sessione "Planetary aeolian research", revisione e selezione abstract
- 2016: **LOC member**, First DREAMS scientific meeting, Napoli, Italy
- 2010: **LOC member**, Geological mapping of Mars: a workshop on new concept and tools, Tuscany
- 2007: **LOC member**, 2nd International Workshop-Exploring Mars and its Earth Analogues, Trento

Talk (Relatore)

Conferenze internazionali

1. 2022: **Silvestro S.** et al., Characterize the Climate of Mars Through the Study of the Aeolian Environment at Oxia Planum, 14 ExoMars Science Working Team (ESWT), ALTEC, Torino, 11-13 October.
2. 2022: **Silvestro S.** et al., Aeolian landforms in the ExoMars 2022 landig site, a regional perspective, 7th International Planetary Dunes Workshop, LPI, 3015, May 17-20, Alamosa (CO), USA.
3. 2022: **Silvestro S.** et al., Aeolian processes at the ExoMars 2022 landing site, European Geophysical Union (EGU) General Assembly, https://doi.org/10.5194/egusphere-egu22-11218
4. 2021: **Silvestro S.** et al., Change in the Wind and Climate at the ExoMars 2022 Landing Site in Oxia Planum (Mars), European Geophysical Union (EGU) General Assembly, https://doi.org/10.5194/egusphere-egu21-3429
5. 2020: **Silvestro S.**, et al., Active and fossil aeolian bedforms in Arabia Terra (Mars): climate and sedimentological implications, EGU General Assembly 2020, EGU2020-10561, https://doi.org/10.5194/egusphere-egu2020-10561
6. 2020: **Silvestro S.** et al., Aeolian landforms in the ESA/ROSCOSMOS ExoMars 2020 landig site of Oxia Planum (Mars), 6th International Planetary Dunes Workshop, LPI, May 12-13, Online
7. 2019: **Silvestro S.** et al., First evidence for bright-toned megaripple migration on Mars, Vol. 13, EPSC-DPS2019-1661-1, EPSC-DPS Joint Meeting 2019
8. 2017: **Silvestro S.** et al., Large ripples in Gale Crater (Mars): Morphology and dynamic, 5th International Planetary Dunes Workshop, LPI Contribution No. 1961, St. George, (UT), USA.
9. 2016: **Silvestro S.** et al., Non transverse large ripples in Gale Crater (Mars), 32nd IAS Meeting of Sedimentologist, Marrakech, Morocco.
10. 2015: **Silvestro S.** et al., Longitudinal Aeolian Depositional Features on Mars? 4th International Planetary Dunes Workshop, LPI Contribution No. 1843, p.8049, May 19-22, Boise (ID), USA.

11. 2015: **Silvestro S.** et al., Relict aeolian bedforms and a new type of wind streak in the ESA ExoMars landing ellipse in Meridiani Planum, Mars (2015), 46th Lunar and Planetary Science Conference, 1155, March 16-20, The Woodlands (TX), USA.
12. 2013: **Silvestro S.** et al., Dune and ripple migration along Curiosity's traverse in Gale Crater on Mars, AGU Fall Meeting Abstracts 1, 1772, December 9-13, San Francisco (CA), USA.
13. 2012: **Silvestro S.** et al., Active Aeolian Processes Along Curiosity's Traverse, 3rd International Planetary Dunes Workshop, LPI Contribution No. 1673., p.87-88, June 12-15, Flagstaff (AZ), USA.
14. 2012: **Silvestro S.** et al., Active Aeolian Processes Along Curiosity's Traverse in Gale Crater, 43rd Lunar and Planetary Science Conference, LPI Contribution No. 1659, id.1804, March 19-23, The Woodlands (TX), USA.
15. 2010: **Silvestro S.** et al., Ripple migration on active dark dunes in Nili Patera (Mars), 2nd International Planetary Dunes Workshop, LPI Contribution No. 1552, p.65-66, May 18-21, Alamosa (CO), USA.
16. 2010: **Silvestro S.** et al., Ripple migration and small modifications of active dark dunes in Nili Patera (Mars), 41st Lunar and Planetary Science Conference, 1820, March 1-5, The Woodlands (TX), USA (**NASA/JPL press release**).
17. 2009: **Silvestro S.** et al, Complex dark dune fields in Noachis terra, Mars, relationship between morphologies and wind regimes, 40th Lunar and Planetary Science Conference, 1862, March 23-27, The Woodlands (TX), USA.
18. 2009: **Silvestro S.** et al., Dune morphology sand transport pathways and possilbe surce areas in East Thaumasia region (Mars), 27th IAS Meeting of Sedimentologists, Sept. 20-23, Alghero, Italy.
19. 2008: **Silvestro S.** et al., Complex dunes in the southern hemisphere of Mars: age and wind regimes, 39th Lunar and Planetary Science Conference 39, 1893.7, League City (TX), USA.
20. 2008: **Silvestro S.** and GG Ori, Interconnected ergs in east Thaumasia region: sediment transport pathways and possible source areas, 1st International Planetary Dunes Workshop 1403, 63-64, April 29-May 2, Alamogordo (NM), USA.

Conferenze nazionali

21. 2022: **Silvestro S.** et al., Aeolian landforms in the ExoMars landig site, a regional perspective, XVII Congresso di Scienze Planetarie, 20-24 giugno, Napoli.
22. 2020: **Silvestro S.** et al., Aeolian processes on Mars: bedform analysis and implications for climate, XVI Congresso di Scienze Planetarie, 3-7 febbraio.
23. 2015: **Silvestro S.** et al., A complex aeolian bedform pattern in the ESA ExoMars 2016 landing ellipse in Meridiani Planum (Mars), XII Congresso di Scienze Planearie, Bormio.
24. 2008: **Silvestro S.** Analisi geomorfologica dei depositi eolici nella regione di Thaumasia (Marte), VIII Congresso di Scienze Planearie, Bormio.

RICONOSCIMENTI E PREMI

- 2021: American Geophysical Union: 10% **most downloaded paper in 2020** (vedi allegato AGU_award.pdf) riferito a pubblicazione n. 3 in sezione “10 Pubblicazioni selezionate”

INDIPENDENT THINKING

- Ho **ideato e scritto** un progetto che è stato **selezionato dall’ESA** per entrare come Guest Investigator nella missione ESA ExoMars per combinare I dati dello strumento MicroMed (di cui sono Co-I) con I dati delle camere sul rover e meteorologici sulla surface platform (vedi “Characterize the Climate of Mars Through the Study of the Aeolian Environment at Oxia Planum” in sez. Coord./Resp. Progetti Ricerca Scientifico/Tecn.).
- Il postdoc di 3 anni negli Stati Uniti è stato finanziato dalla NASA (programma Mars Data Analysis) tramite un progetto **che ho ideato e scritto** col ruolo di Science PI (probabilità di finanziamento inferiore al 15%) (vedi “Dune morphology and atmospheric models, implication for present-day Martian aeolian activity” in sez. Coord./Resp. Progetti Ricerca Scientifico/Tecn.)
- Durante i miei anni di lavoro in INAF continuo a portare avanti la mia indipendente attività di ricerca in SETI. **Tre proposal che ho contribuito a scrivere come Co-I sono stati finanziati dalla NASA** (programma Mars Data Analysis) (vedi “Seasonal, annual, and multidirectional sand flux trends related to global or regional forcing factors”, “Characterizing the Dynamic Activity of Martian Mega-ripples and Transverse Aeolian Ridges” & “The enigmatic Transverse Aeolian Ridges (TARs) caught in the act of pattern evolution” in sez. Responsabilità WP e/o Task Progetti
- **Ho collaborato con il NASA Mars Science Laboratory (MSL) Curiosity team** durante la prima fase della “Bagnold dunes campaign” per l’interpretazione dei dati della camera HiRISE (vedi “Produzione scientifica complessiva – pubblicazioni – peer reviewed” articolo num. 22)

ALTRI INCARICHI DI RICERCA

Contributi orali ad invito & seminari

Internazionali

- 2021: Solid Earth Seminars - Earth Sciences and Climate Change (online), Lisbon University (Portugal), Aeolian processes on Mars: bedforms and climate
- 2016: ExoMars 2016 Launch Event, ESA-ESOC 14 Marzo, Darmstadt (Germany), Science on the ExoMars Schiaparelli Lander Overview, The DREAMS Experiment
- 2014: SETI Institute Colloquium, Mountain View, CA (USA), Dune and Ripple Migration Along Rover Curiosity's Traverse in Gale Crater on Mars (https://www.youtube.com/watch?v=cZc8oqEnBMk)

Nazionali

- 2019: Seminari dell'Osservatorio Astronomico di Capodimonte, Napoli, Quel diavolo di un Marte
- 2016: Festival dell'Innovazione e della Scienza "Noi Robot", 15-23 Ottobre, Setimo Torinese, Schiaparelli ed il progetto ExoMars dell'Agenzia Spaziale Europea
- 2015: Osservatorio Astronomico di Teramo, Active Aeolian Processes on Mars
- 2015: V Astro meeting Unione Astrofili Italiani, Napoli, Martian Aeolian Processes
- 2015: XLVIII Congresso Unione Astrofili Italiani, Maddaloni (CE), Martian Wind Processes
- 2017: LXI Congresso della Società Astronomica Italiana, Padova, 12-15 Settembre, L'azione del vento sulla superficie Marziana.
- 2014: Osservatorio Astronomico di Capodimonte, Napoli, Active Aeolian Processes Along Rover Curiosity's Traverse in Gale Crater on Mars

Supervisione & tutoraggio

- 2023: Alice Botteon (Correlatore per tesi di laurea su migrazione dune & ripple Marziani - Università d' Annunzio Chieti/Pescara)
- 2014: Mattia Barbarossa (Tutore, avvicinamento studenti scuola superiore alla ricerca - INAF OACN Napoli)
- 2008: Marco Cardinale (Correlatore per tesi di laurea su processi eolici Marziani e terrestri - Università d' Annunzio - Pescara, Italia)
- 2006: Piero D'Incecco (Correlatore tesi triennale su processi eolici Marziani - Università d' Annunzio - Pescara, Italia)
- 2006: Massimo Di Nucci (Correlatore per tesi di laurea su processi eolici Marziani - Università d' Annunzio - Pescara, Italia)

Divulgazione

Nelle scuole

- 2021: Marte e i suoi deserti: studenti scuola media, Istituto Comprensorio Nichelino2, Nichelino (TO)
- 2019: I corpi del Sistema Solare: a studenti di asilo, elementare e medie, École française Alexandre Dumas via Francesco Crispi, 86, Napoli (presenazione in lingua francese)
- 2018: Il Sistema Solare: a studenti di scuola media, École française Alexandre Dumas via Francesco Crispi, 86, Napoli (presenazione in lingua francese)
- 2015: L'esplorazione del Sistema Solare, Scuola Elementare Primaria Altiero Spinelli, Via S. Sebastiano Po, 6, 10132 Torino
- 2014: Il pianeta Marte e la sua superficie, Scuola Elementare Primaria Altiero Spinelli, Via S. Sebastiano Po, 6, 10132 Torino

Altra divulgazione

- 2022: Notte dei Ricercatori, INAF Osservatorio Astronomico di Capodimonte: Marte e i suoi deserti
- 2019: Mostra CRAL ALTEC, Torino la Luna ed oltre, Torino, 16-17 novembre, presentazione orale L'esplorazione di Marte e la missione ExoMars.
- 2019: Pint of Science, Pozzuoli (NA), I deserti di Marte
- 2019: AstroKid, INAF Osservatorio Astronomico di Capodimonte: Il pianeta Marte e la sua superficie
- 2018: Notte dei Ricercatori, Piazza del Gesù, Napoli: L'Osservatorio di Capodimonte e la missione ExoMars
- 2016: Intervista a INAF TV presso il Festival dell'innovazione e della scienza, 15-23 ottobre, Settimo Torinese
- 2016: Intervista a retenews 24: Noi napoletani alla conquisa di Marte, ecco quello che ci aspettiamo di trovare
- 2016: A Portici tra cielo e terra, serata sotto le stelle alla reggia di Portici (NA), Processi eolici Marziani
- 2016: Notte dei Ricercatori, INAF Osservatorio Astronomico di Capodimonte: La Missione ExoMars 2016 e il lander Schiaparelli

Press release

Internazionali

- 2020: Articolo (**1° Autore**) "Megaripple Migration on Mars" (n. 3 sez. "10 Pubblicazioni selezionate") ripreso da Science, AGU EOS e molte altre testate scientifiche specializzate
  - https://www.science.org/content/article/giant-waves-sand-are-moving-mars
  - https://eos.org/research-spotlights/megaripple-migration-offers-insights-into-martian-atmosphere
- 2016: Articolo "The role of atmospheric electric field in the dust lifting process", (n. 26 sez. "Produzione Scientifica complessiva – Peer reviewed - Articoli") publicato su GRL menzionato in Science e da AGU press release
  - http://www.sciencemag.org/news/2016/07/static-electricity-strengthens-desert-dust-storms
  - https://blogs.agu.org/geospace/2016/06/30/electric-forces-desert-air-create-mighty-dust-storms-study-finds
- 2013: Articolo **(1° autore)** "Pervasive Aeolian Activity along rover Curiosity's traverse in Gale Crater on Mars", (n. 6 sez. "10 Pubblicazioni selezionate") pubblicato su *Geology* e selezionato come **articolo di copertina** (Geology_cover.pdf in allegato). L'articolo è stato inoltre menzionato in diverse **press release** e blog tra cui SETI Institute e Red Planet Report (Arizona State University).
  - http://redplanet.asu.edu/?p=1591
- 2011: Articolo **(1° autore)** "Active Aeolian Processes on Mars: A Regional Study in Arabia and Meridiani Terrae", (n. 9 sez. "10 Pubblicazioni selezionate"), pubblicato su *GRL* **menzionato nei "Research spotlight" in AGU EOS transaction** Vol. 93 n. 1, 3 Gennaio 2012 "Winds drive dune movement on Mars" (EOS.pdf allegato) e nel blog Red Planet Report (Arizona State University).
  - http://redplanet.asu.edu/?p=1039

- 2010: USA NASA JPL press release, **prima evidenza** attività eolica su Marte da HiRISE, abstract **(1° autore)** selezinato tra tutti quelli presentati nella sessione eolica per press release NASA JPL (abst. n. 21, sezione "Produzione Scientifica complessiva – Non Peer-reviewed – Abstract primo autore)
  - http://mars.jpl.nasa.gov/news/whatsnew/index.cfm?FuseAction=ShowNews&NewsID=981

Nazionali

- 2021: Articolo (**1° Autore**) "Periodic Bedrock Ridges at the ExoMars 2022 landing site: Evidence for a Changing Wind Regime" (n. 2 sez. "10 Pubblicazioni selezionate") ripreso da MEDIA INAF
  - https://www.media.inaf.it/2021/01/15/oxia-planum-scolpita-dai-venti-marziani/

ALTRI TITOLI

Formazione & Università

- 2018: **Abilitazione Scientifica Nazionale**, 04/A2 - Geologia Strutturale, Geologia Stratigrafica, Sedimentologia e Paleontologia, Seconda fascia
- 2009: **Dottorato di ricerca in Scienze**, International Research School of Planetary Science, Viale Pindaro 42, 65127, Pescara, Italia
- 2005: Laurea in Scienze Naturali, Università di Torino, Facoltà di Scienze M.F.N., Via A. Albertina 13 10123 Torino, Italia

Corsi

- 2013: COSI-Corr training, CALTECH - Pasadena, California, USA
- 2011: Photogrammetric Processing of Planetary Stereo Imagery using ISIS and SOCET SET®, USGS Astrogeology - Flagstaff, Arizona, USA
- 2007: First Mars Express Data Workshop – ESA – Villafranca del Castillo (Madrid – Spain)
- 2007: Thirty years of Sequence Stratigraphy, Advanced course in Sequence Stratigraphy – Prof. Bilal U. Haq, Università di Bari – Università della Basilicata (Italy)
- 2007: Seismic Facies, Sequence Stratigraphy and Petrophysics of Carbonate Systems – Prof. G.P. Eberli, organized by the Università di Perugia (Italy)

Appartenenza a gruppi/associazioni

- International Association of Sedimentologist (IAS)
- European Geophysical Union (EGU)

10 PUBBLICAZIONI SELEZIONATE

Contributo e impatto

Delle dieci pubblicazioni selezionale, nove (2-10) sono articoli scientifici che ho guidato da primo autore. Di questi articoli ho quindi sviluppato il razionale e analizzato i dati. L'unica pubblicazione in cui sono secondo autore è un "news & views" ad invito in cui commento un altro articolo uscito per la rivista Nature Astronomy. Gli articoli n. 2, 3, 6, 8 e 9 sono stati ripresi da diversi media nazionali ed internazionali e sono stati menzionati da altre riviste scientifiche tra cui *Science* (art. 3) & AGU EOS (art. 3 e 8 – Vedi anche sez. CV "Press releases"). L'articolo n. 6 è stato scelto come cover article della rivista Geology (allegato Geology_cover.pdf).

Lista

1. 2022: H. Yizhaq & **Silvestro S.**, The aeolian Solar System, ***Nature Astronomy***, 6, 883-884, https://doi.org/10.1038/s41550-022-01744-6
2. 2021: **Silvestro S.**, Pacifici A., Salese F., Vaz D.A., Neesemann A. Tirsch D., Popa C.I., Pajola M., Franzese G., Mongelluzzo G., Ruggeri A.C., Cozzolino F., Porto C. & F. Esposito, Periodic Bedrock Ridges at the ExoMars 2022 landing site: Evidence for a Changing Wind Regime, ***Geophysical Research Letters***, 48, e2020GL091651, https://doi.org/10.1029/2020GL091651 (MEDIA INAF Press release)
3. 2020: **Silvestro S.**, Chojnacki M., Vaz D.A., Cardinale M., Yizhaq H. & F. Esposito, Megaripple Migration on Mars, ***Journal of Geophysical Research: Planets***, e2020JE006446. https:// doi.org/10.1029/2020JE006446 (**Science -** https://www.science.org/content/article/giant-waves-sand-are-moving-mars **- and EOS -** https://eos.org/research-spotlights/megaripple-migration-offers-insights-into-martian-atmosphere **- press release**)
4. 2016: **Silvestro S.**, Vaz D.A., Yizhaq H. & F. Esposito, Dune-like dynamic of Martian Aeolian large ripples, ***Geophysical Research Letters***, 43, https://doi.org/10.1002/2016GL070014
5. 2015: **Silvestro S.**, Vaz D.A., Di Achille G., Popa C.I. & F. Esposito, Evidence for different episodes of aeolian construction and a new type of wind streak in the 2016 ExoMars landing ellipse in Meridiani Planum, Mars, ***Journal of Geophysical Research: Planets***, 120, https://doi.org/10.1002/2014JE004756
6. 2013: **Silvestro S.**, Vaz D.A., Ewing R.C., Rossi A.P., Fenton L.K., Michaels T.I., Flahaut J. & P.E. Geissler, Pervasive aeolian activity along rover Curiosity's traverse in Gale Crater, Mars, ***Geology***, 41, 4, http://geology.gsapubs.org/cgi/doi/10.1130/G34162.1 (**Cover article,** vedi allegato Geology_cover.pdf)
7. 2012: **Silvestro S.**, Fenton L.K., Michaels T.I., Valdez A. & G.G. Ori, Interpretation of the complex dune morphology on Mars: dune activity, modelling and a terrestrial analogue, ***Earth Surface Processes and Landforms***, 37, 13, 1424-1436, https://doi.org/10.1002/esp.3286
8. 2011: **Silvestro S.**, Vaz D.A., Fenton L.K. & P.E. Geissler, Active aeolian processes on Mars: A regional study in Arabia and Meridiani Terrae, ***Geophysical Research Letters***, 38, L20201, http://doi.wiley.com/10.1029/2011GL048955 (**EOS press release,** vedi allegato EOS.pdf)
9. 2010: **Silvestro S.**, Fenton L.K., Vaz D.A., Bridges N.T. & G.G. Ori, Ripple migration and dune activity on Mars: Evidence for dynamic wind processes, ***Geophysical Research Letters***, 37, 20, https://doi.org/10.1029/2010GL044743 (**NASA/JPL press release**)
10. 2010: **Silvestro S.**, Di Achille G. & G.G. Ori, Dune morphology, sand transport pathways and possible source areas in east Thaumasia Region (Mars), ***Geomorphology***, 121, 1-2, 84-97, https://doi.org/10.1016/j.geomorph.2009.07.019

PRODUZIONE SCIENTIFICA COMPLESSIVA

48 pubblicazioni (10 da primo autore, 7 da secondo autore), **1022 citazioni totali**, **458 citazioni per articoli da primo autore (45% del totale)**, h-index=18 (fonte scopus)

★ **Very high impact papers (> 100 citazioni), ◆ high impact papers (> 40 citazioni)**

Peer reviewed

Articoli

1. 2023: Rangarajan V.G., L.L. Tornabene, G.R. Osinski, S.J. Conway, F.P. Seelos, **S. Silvestro**, F. Salese, M. Pajola, A. Lucchetti, G. Munaretto, V.T. Bickel N. Thomas & G. Cremonese, Change detection and monitoring of active Martian surface phenomena with the Colour and Stereo Surface Imaging System (CaSSIS) onboard the ExoMars Trace Gas Orbiter (TGO), *Icarus*, 394, 115443, https://doi.org/10.1016/j.icarus.2023.115443
2. 2022: Zakharov A.V., G.G. Dolnikov,…**S. Silvestro** (46mo autore di 48),… et al., Dust Complex for Studying the Dust Particle Dynamics in the Near-Surface Atmosphere of Mars, Solar System Research, 56, 351–368, https://doi.org/10.1134/S0038094622060065
3. 2022: Yizhaq H. & **Silvestro S.**, The aeolian Solar System, *Nature Astronomy*, 6, 883-884, https://doi.org/10.1038/s41550-022-01744-6
4. 2022: **Silvestro S.** & T. Titus, Planetary Aeolian Landforms: An Introduction to the Fifth Planetary Dunes Workshop Special Issue, *Journal of Geophysical Research: Planets*, 127, e2022JE007198, https://doi. org/10.1029/2022JE007198
5. 2022: Yizhaq H., Kok J.F., **Silvestro S.**, Saban L., Katra I., Numerical Simulations of Large Martian Impact Ripples, Geoscience, 12(11), 422, https://doi.org/10.3390/geosciences12110422
6. 2022: Pajola M., Pozzobon R., **Silvestro S.**, Salese F., Rossato S. Pompilio L., Munaretto G., Teodoro L., Kling A., Simioni E., Lucchetti A. & L. Tornabene, Geology, in-situ resource-identification and engineering analysis of the Vernal crater area (Arabia Terra): A suitable mars human landing site candidate, Planetary and Space Science, 213, April, 105444, https://doi.org/10.1016/j.pss.2022.105444
7. 2021: Chojnacki M., Vaz D.A., **Silvestro S.** & D.C.A. Silva, Widespread Megaripple Activity Across the North Polar Ergs of Mars, *Journal of Geophysical Research: Planets*, 126(12), e2021JE006970, https://doi.org/10.1029/2021JE006970 (**cover article**)
8. 2021: Cozzolino F., Gabriele F., Mongelluzzo G., Molfese C., Esposito F., Ruggeri A.C., Porto C., **Silvestro S.**, Popa C.I., Mennella V., Scaccabarozzi D. & B. Saggin, Techniques to verify the sampling system and flow characteristics of the sensor MicroMED for the ExoMars 2022 Mission, *Measurement: Journal of the International Measurement Confederation*, 185, 110075, doi: 10.1016/j.measurement.2021.110075
9. 2021: Yizhaq, H., **Silvestro S.** & K. Kroy, , Editorial: Physics and Geomorphology of Sand Ripples on Earth and in the Solar System, *Frontiers in Earth Science*, 2021, 9, 780100, DOI 10.3389/feart.2021.780100
10. 2021: Franzese G., **Silvestro S.**, Vaz D.A., Popa C.I., Cozzolino F., Esposito F., Mongelluzzo G., Porto C. & A.C. Ruggeri, Dust devils: Characteristics of the forward motion from a Saharan survey, Volume 50, March 2021, 100678, https://doi.org/10.1016/j.aeolia.2021.100678
11. 2021: **Silvestro S.**, Pacifici A., Salese F., Vaz D.A., Neesemann A. Tirsch D., Popa C.I., Pajola M., Franzese G., Mongelluzzo G., Ruggeri A.C., Cozzolino F., Porto C. & F. Esposito, Periodic Bedrock Ridges at the ExoMars 2022 landing site: Evidence for a Changing Wind Regime, *Geophysical Research Letters*, 48, e2020GL091651, https://doi.org/10.1029/2020GL091651 (**MEDIA INAF Press release**)
12. 2021: Fenton L.K., **Silvestro S.** & G. Kocurek , Transverse Aeolian Ridge Growth Mechanisms and Pattern Evolution in Scandia Cavi, Mars, *Frontiers in Earth Science*, Volume 819, January 2021, 619704, DOI 10.3389/feart.2020.619704
13. 2020: **Silvestro S.**, Chojnacki M., Vaz D.A., Cardinale M., Yizhaq H. & F. Esposito, Megaripple Migration on Mars, *Journal of Geophysical Research: Planets*, e2020JE006446. https:// doi.org/10.1029/2020JE006446 (**Science and EOS press release**)
14. 2019: Mongelluzzo G., Esposito F., Cozzolino F., Molfese C., **Silvestro S.**, Franzese G., Popa C.I., Lubieniecki M., Cortecchia F., Saggin B., Scaccabarozzl D. & A. Zakharov, CFD analysis and optimization of the sensor "MicroMED" for the ExoMars 2020 mission, *Measurement*, 147, December 2019, 106824, https://doi.org/10.1016/j.measurement.2019.07.052
15. 2019: Flahaut J., Janice B., **Silvestro S.**, Tedesco D., Daniel I., & D. Loizeau, The Italian Solfatara as an analog for Mars fumarolic alteration, *American Mineralogist*, 104, Issue 11, 1565-1577, DOI 10.2138/am-2019-6899
16. 2019: Yizhaq H., Bel G., **Silvestro S.**, Elperin T., Kok J.F., Cardinale M., Provenzale A. & I. Katra, The origin of the transverse instability of aeolian megaripples, *Earth and Planetary Science Letters*, 512, 59-7015, DOI 10.1016/j.epsl.2019.01.025
17. 2018: Siminovich, A., Elperin T., Katra I., Kok J.F., Sullivan R., **Silvestro S.** & H. Yizhaq, Numerical study of shear stress distribution over sand ripples under terrestrial and Martian conditions, *Journal of Geophysical Research: Planets*, 124, 1, 175-185, https://doi.org/10.1029/2018JE005701
18. 2018: Banks M.E., Fenton L.K., Bridges N.T., Geissler P.E., Chojnacki M., Runyon K.D., **Silvestro S.** & J.R. Zimbelman, Patterns in Mobility and Modification of Middle and High Latitude Southern Hemisphere Dunes on Mars, *Journal of Geophysical Research: Planets*, 123, 12, 3205-3219, https://doi.org/10.1029/2018JE005747

19. 2018: Esposito, F., Debei S., ... **Silvestro S.** (57mo autore di 68), ...et al., The DREAMS experiment onboard the Schiaparelli Module of the ExoMars 2016 mission: design, performances and expected results, *Space Science Review, 214:103*, https://doi.org/10.1007/s11214-018-0535-0
20. 2018: Franzese G., Esposito F., Lorenz R., **Silvestro S.**, Popa C.I., Molinaro R., Cozzolino F., Molfese C., Marty L. & N. Deniskina, Electric properties of dust devils. *Earth and Planetary Science Letters, 493, 71-81*, https://doi.org/10.1016/j.epsl.2018.04.023
21. 2018: Bettanini C., Esposito F., ...**S. Silvestro** (17mo autore di 57), ...et al., The DREAMS experiment flown on the ExoMars 2016 mission for the study of Martian environment during the dust storm season, *Journal of the International Measurement Confederation*, 122, 484-493, https://doi.org/10.1016/j.measurement.2018.01.019
22. ◆ 2017: Bridges N.T., Sullivan R., Newmann C., Navarro S., Van Beek J., Ewing R.C., Ayoub F., **Silvestro S.**, Gasnault O., Le Mouélic S., Lapotre M. & W. Rapin, Martian Aeolian Activity at the Bagnold Dunes, Gale Crater: The View from the Surface and Orbit, *Journal of Geophysical Research: Planets*, 122, 2077-2110, doi:10.1002/2017JE005263 (**con il team di Curiosity**)
23. 2017: Diniega S., Krevalevsky M., Radebaugh J., **Silvestro S.**, Telfer M. & D. Tirsch, Our evolving understanding of aeolian bedforms, based on studies of different worlds, *Aeolian Research, 26, 5-27*, https://doi.org/10.1016/j.aeolia.2016.10.001
24. 2017: Vaz D.A., **Silvestro S.**, Sarmento P.T.K. & M. Cardinale, Migrating meter-scale bedforms on Martian dark dunes: are terrestrial aeolian ripples good analogs? *Aeolian Research, 26, 101-116*, https://doi.org/10.1016/j.aeolia.2016.08.003
25. ◆ 2016: **Silvestro S.**, Vaz D.A., Yizhaq H. & F. Esposito, Dune-like dynamic of Martian aeolian large ripples, *Geophysical Research Letters*, 43 (16), 8384-8389, doi:10.1002/2016GL070014
26. ◆ 2016: Esposito F, Molinaro R., Popa C.I., Molfese C., Cozzolino F., Marty L., Taj-Eddine K., Di Achille G., Franzese G., **Silvestro S.** & G.G. Ori, The role of atmospheric electric field in the dust lifting process, *Geophysical Research Letters, 43 (10), 5501-5508*, doi:10.1002/2016GL068463 (**Science e AGU press release**)
27. 2016: Cardinale M., **Silvestro S.**, Vaz D.A., Michaels T.I., Bourke M.C., Komatsu G. & L. Marinangeli, Present-day aeolian activity in Herschel Crater, Mars, *Icarus*, 265, 139-148, https://doi.org/10.1016/j.icarus.2015.10.022
28. 2015: **Silvestro S.**, Vaz D.A., Di Achille G., Popa C.I. & F. Esposito, Evidence for Different Episodes of Aeolian Construction and a New Type of Wind Streak in the 2016 ExoMars Landing site in Meridiani Planum, Mars, *Journal of Geophysical Research*, 120 (4), 760-774, doi:10.1002/2014JE004756
29. 2014: Vaz D.A. & **S. Silvestro**, Mapping and characterization of small-scale aeolian structures on Mars: an example from the MSL landing site in Gale Crater, *Icarus,* 230, 151-16, https://doi.org/10.1016/j.icarus.2013.08.007
30. 2014: Vaz D.A., Spagnuolo, M.G., & **S. Silvestro**, Morphometric and geometric characterization of normal faults on Mars, *Earth and Planetary Science Letters*, 401, 83-94, https://doi.org/10.1016/j.epsl.2014.05.022
31. ◆ 2013: Bridges N.T, Geissler P.E., **Silvestro S.** & M. Banks, Bedform Migration on Mars: Current Results and Future Plans, *Aeolian Research,* 9, p. 133-151, https://doi.org/10.1016/j.aeolia.2013.02.004
32. ★ 2013: **Silvestro S.**, Vaz D.A., Ewing R.C.E., Rossi A.P., Fenton L.K., Michaels T.I., Flahaut J. & P.E. Geissler, Pervasive Aeolian Activity along rover Curiosity's traverse in Gale Crater on Mars, *Geology,* 41 (4), p.483-486, doi:10.1130/G34162.1 (**cover article**)
33. 2013: Geissler P., Stantzos N., Bridges N.T., Bourke M., **Silvestro S. &** L.K. Fenton, Shifting Sand on Mars: 3 Case Studies, *Earth Surface Processes and Landforms,* 38 (4), p. 407-412, DOI: 10.1002/esp.3331
34. 2012: Cardinale M., Komatsu G., **Silvestro S.** & D. Tirsch, The Influence of Local Topography for wind direction on Mars: Two Examples of Dune Fields in Crater Basins, *Earth Surface Processes and Landforms,* 37 (13), p. 1437-1443, DOI: 10.1002/esp.3289
35. 2012: **Silvestro S.**, Fenton L.K., Michaels T.I., Valdez A. $ G.G. Ori, Interpretation of the Complex Dune Morphlogy on Mars: Dune Activity, Modelling and a Terrestrial Analogue, *Earth Surface Processes and Landforms,* 37 (13), p. 1424-1436, DOI: 10.1002/esp.3286
36. 2012: Gardin E., Allemand P., Quantin C., **Silvestro S.** & C. Delacourt, Dune Fields on Mars: Recorders of a Climate Changes? *Planetary and Space Science,* 60 (1), p. 314-321, doi:10.1016/j.pss.2011.10.004
37. ◆ 2011: **Silvestro S.**, Vaz D.A., Fenton L.K. & P.E. Geissler, Active Aeolian Processes on Mars: A Regional Study in Arabia and Meridiani Terrae, *Geophysical Research Letters,* 38, L20201, https://doi.org/10.1029/2011GL048955 (**highlighted in EOS**)
38. ★ 2010: **Silvestro S.**, Fenton L.K., Vaz D.A., Bridges N.T. & G.G. Ori, Ripple Migration and Dune Activity on Mars: Evidence for Dynamic Wind Processes, *Geophysical Research Letters,* 37, L20203, doi:10.1029/2010GL044743
39. 2010: **Silvestro S.**, Di Achille G. & G.G. Ori, Dune Morphology, Sand Transport Pathways and Possible Source Areas in East Thaumasia Region (Mars), *Geomorphology,* 121, 84-97, doi:10.1016/j.geomorph.2009.07.019

Capitoli in libri

40. 2010: Brookfield M.E. & **S. Silvestro**, Eolian systems. In: Dalrymple, R. W. and James, N.P. (editors), Facies Models. *Geological Society of Canada*, St Johns, Newfoundland

Voci enciclopediche

41. 2014 - **Silvestro S.** & E. Hermas, Reversing dune, *Encyclopedia of Planetary Landforms*, Springer Science, New York, DOI 10.1007/978-1-4614-9213-9_305-1

Proceedings atti convegni

42. 2022: Mongelluzzo G., Franzese G., …**Silvestro S.** (8vo di 18 autori) …et al., CFD Analysis of the unpredicted bimodal size distribution histograms for the ExoMars MicroMED sensor, *9th IEEE International Workshop on Metrology for AeroSpace*, MetroAeroSpace 2022, Pisa 27-29 June, 182210, doi: 10.1109/MetroAeroSpace54187.2022.9856036

43. 2022: Franzese G., Santiuste N.A., … **Silvestro S.** (14mo di 20 autori) …et al., Analysis and management algorithms of the noise level for the ExoMars MicroMED instrument, *9th IEEE International Workshop on Metrology for AeroSpace* (MetroAeroSpace), Pisa, Italy, 2022, pp. 225-230, doi: 10.1109/MetroAeroSpace54187.2022.9856236
44. 2021: Franzese G., Mongelluzzo G., … **Silvestro S.** (12mo di 14 autori) …et al., MicroMED: Study of the relation between signal durations and grain diameters, *8th IEEE International Workshop on Metrology for AeroSpace, MetroAeroSpace*, Virtual, Online 22-25 June 2021, 171354, DOI 10.1109/MetroAeroSpace51421.2021.9511713
45. 2021: Mongelluzzo G., Franzese G., … **Silvestro S.** (8vo di 18 autori) …et al., Performance analysis of the "microMED" optical particle counter in windy conditions, *IEEE International Workshop on Metrology for AeroSpace*, MetroAeroSpace 2021 - ProceedingsPages 241 – 24623 Article number 9511691, DOI 10.1109/MetroAeroSpace51421.2021.9511691
46. 2018: Mongelluzzo G., Esposito F., … **Silvestro S.** (5o di 12 autori) …et al., Optimization of the Fluid Dynamic Design of the Dust Suite-MicroMED Sensor for the ExoMars 2020 Mission, *5th IEEE International Workshop on Metrology for AeroSpace* (MetroAeroSpace), Rome, Italy, 2018, pp. 134-139, doi: 10.1109/MetroAeroSpace.2018.8453505
47. 2017: Bettanini C., Esposito F., ... **Silvestro S.** (17mo di 57 autori), ...et al., The DREAMS experiment flown on the ExoMars 2016 mission for the study of Martian environment during the dust storm season, *IEEE International Workshop on Metrology for AeroSpace* (MetroAeroSpace), Padua, Italy, 2017, 249-255, doi: 10.1109/MetroAeroSpace.2017.7999574
48. 2014: Bettanini C., Esposito F., ... **Silvestro S.** (47mo autore di 57), …et al. The DREAMS experiment on the ExoMars 2016 mission for the study of Martian environment during the dust storm season, Metrology for Aerospace (MetroAeroSpace), 2014 IEEE, 167-173, 10.1109/MetroAeroSpace.2014.6865914.

Non peer-reviewed

White papers

1. 2021: Dinieaga S., Bramson A., … **Silvestro S.** (19mo autore di 22), …et al., Mars as a "natural laboratory" for studying surface activity on a range of planetary bodies, Planetary Science and Astrobiology Decadal Survey 2023-2032 white paper e-id. 123; Bulletin of the American Astronomical Society, Vol. 53, Issue 4, e-id. 123 (2021), DOI: 10.3847/25c2cfeb.950513cc

Abstract primo autore

2. 2023: **Silvestro S.** et al., Characterizing the Mobility of Megaripples on Mars, 54th Lunar and Planetary Science Conference 2023 (LPI Contrib. No. 2806)
3. 2022: **Silvestro S.** et al., Aeolian landforms in the ExoMars 2022 landig site, a regional perspective, 7th International Planetary Dunes Workshop, 3015, May 17-20, Alamosa (CO), USA.
4. 2022: **Silvestro S.** et al., Aeolian processes at the ExoMars 2022 landing site, European Geophysical Union (EGU) General Assembly, https://doi.org/10.5194/egusphere-egu22-11218
5. 2021: **Silvestro S.** et al., Change in the Wind and Climate at the ExoMars 2022 Landing Site in Oxia Planum (Mars), European Geophysical Union (EGU) General Assembly, https://doi.org/10.5194/egusphere-egu21-3429
6. 2020: **Silvestro S.** et al., Aeolian landforms in the ESA/ROSCOSMOS ExoMars 2020 landig site of Oxia Planum (Mars), 6th International Planetary Dunes Workshop, LPI, May 12-13, Online.
7. 2020: **Silvestro S.** et al., Active and fossil aeolian bedforms in Arabia Terra (Mars): climate and sedimentological implications, EGU General Assembly 2020, EGU2020-10561, https://doi.org/10.5194/egusphere-egu2020-10561
8. 2019: **Silvestro S.** et al., First evidence for bright-toned megaripple migration on Mars, Vol. 13, EPSC-DPS2019-1661-1, EPSC-DPS Joint Meeting 2019
9. 2018: **Silvestro S.** et al., First evidence for bright-toned aeolian bedforms migration on Mars, 10th International Conference on Aeolian Research, June 25-29, Bordeaux, France.
10. 2017: **Silvestro S.** et al., Large ripples in Gale Crater (Mars): Morphology and dynamic, 5th International Planetary Dunes Workshop, LPI Contribution No. 1961, St. George, (UT), USA.
11. 2016: **Silvestro S.** et al., Non transverse large ripples in Gale Crater (Mars), 32nd IAS Meeting of Sedimentologist, Marrakech, Morocco.
12. 2015: **Silvestro S.** et al., Longitudinal Aeolian Depositional Features on Mars? 4th International Planetary Dunes Workshop, LPI Contribution No. 1843, p.8049, May 19-22, Boise (ID), USA.
13. 2014: **Silvestro S.** et al. TAR-Streaks in Meridiani Planum, Mars, Eighth International Conference on Mars, LPI Contribution No. 1791, p.1193, July 14-18, Pasadena, (CA), USA.
14. 2014: **Silvestro S.** et al., Eolian Characterization of the 2016 ExoMars Landing Site: Implications for the DREAMS (Dust Characterization, Risk Assesment and Environment Analyzer on the Martian Surface) Experiment, 45th Lunar and Planetary Science Conference, 1887, March 17-21, The Woodlands (TX), USA.
15. 2015: **Silvestro S.** et al., Relict aeolian bedforms and a new type of wind streak in the ESA ExoMars landing ellipse in Meridiani Planum, Mars (2015), 46th Lunar and Planetary Science Conference, 1155, March 16-20, The Woodlands (TX), USA.
16. 2013: **Silvestro S.** et al., Dune and ripple migration along Curiosity's traverse in Gale Crater on Mars, AGU Fall Meeting Abstracts 1, 1772, December 9-13, San Francisco (CA), USA.
17. 2012: **Silvestro S.** et al., Active Aeolian Processes Along Curiosity's Traverse, 3rd International Planetary Dunes Workshop, LPI Contribution No. 1673., p.87-88, June 12-15, Flagstaff (AZ), USA.
18. 2012: **Silvestro S.** et al., Active Aeolian Processes Along Curiosity's Traverse in Gale Crater, 43rd Lunar and Planetary Science Conference, LPI Contribution No. 1659, id.1804, March 19-23, The Woodlands (TX), USA.
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DATI PERSONALI

Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 e s.m.i.

Le informazioni contenute nel presente "curriculum vitae et studiorum" sono rese sotto la personale responsabilità del sottoscritto,ai sensi degli articoli 46 e 47 del Decreto del Presidente della Repubblica 28 dicembre 2000, numero 445, e successive modifiche ed integrazioni, consapevole della responsabilità penale prevista dall'articolo 76 del medesimo Decreto per le ipotesi di falsità in atti e dichiarazioni mendaci

ALLEGATI

- Domanda di ammissione (allegato A)
- Dichiarazione sostitutiva/atto notorietà (allegato B)
- 10 articoli selezionati in formato pdf (SSilvestro_articoli.zip)
- Copia carta d'identità datata e sottoscritta (Carta_identita_SSilvestro-signed.pdf)
- Award AGU riferito ad articolo n. 3 in "10 Pubblicazioni selezionate) (AGU_award.pdf)
- EOS Research spotlight riferito ad articolo 8 in "10 pubblicazioni selezionate" (allegato perché non più ritrovabile online) (EOS.pdf)
- Copertina Rivista Scientifica "Geology" (Geology_cover.pdf) riferita ad articolo 6 sez cv "10 pubblicazioni selezionate" (anche quella difficilmente ritrovabile online).

Napoli
24/02/2023

Simone Silvestro

