

## **ALLEGATO B**

UNIVERSITÀ DEGLI STUDI DI MILANO

selezione pubblica per n.1 posto di Ricercatore a tempo determinato in tenure track (RTT)

per il settore concorsuale 04/A4 - Geofisica ,

settore scientifico-disciplinare GEO/11 - Geofisica Applicata

presso il Dipartimento di SCIENZE DELLA TERRA "ARDITO DESIO",

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## **Dedalo Marchetti** **CURRICULUM VITAE**

### **INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)**

COGNOME	MARCHETTI
NOME	DEDALO
DATA DI NASCITA	24 SETTEMBRE 1987

### **TITOLI**

#### **TITOLO DI STUDIO**

- **2009-2012** Astronomy and astrophysics master degree at “La Sapienza” University of Rome with 110/110 on 30 January 2012 with a thesis on “Readout electronics for a cosmic microwave array of Kinetic Inductance Detector”, supervisor: prof. Paolo De Bernardis
- **2006-2009** Physics and astrophysics degree at “La Sapienza” University of Rome with 102/110 on 17 December 2009 with a thesis on “Realization and use of a photometer to measure of night sky brightness”, supervisors: prof. Franco Meddi and prof. Roberto Nesci

#### **TITOLO DI DOTTORE DI RICERCA O EQUIVALENTI, OVVERO, PER I SETTORI INTERESSATI, DEL DIPLOMA DI SPECIALIZZAZIONE MEDICA O EQUIVALENTE, CONSEGUITO IN ITALIA O ALL'ESTERO**

- **2013 – 2016** PhD doctorate in Physics at RomaTre University with Thesis title: “A polarimeter to observe exoplanets”, discussed 21 June 2016. Supervisors: prof. Paolo Branchini and prof. Enrico Bernieri.

#### **CONTRATTI DI RICERCA, ASSEGNI DI RICERCA O EQUIVALENTI**

- **2021/01/04-2024/01/03** Dingxin PostDoctoral researcher at The College of Instrumentation and Electrical Engineering of Jilin University, Changchun (China) focused on the satellite data processing related to the study of the preparatory phase of medium-large earthquake in the World
- **2018/09-2020/08** PostDoctoral researcher at the School of Remote Sensing and Geomatics Engineering of Nanjing University of Information Science and Technology (China), focused on the study of the preparatory phase of the medium-large earthquake in the World.
- **2016/02/16-2018/08/31** Research fellowship (assegno di ricercar professionalizzante) in INGV (Italian National Institute of Geophysics and Volcanology) for SAFE (SwArm For Earthquake study) project and its extension founded by ESA. The aim of the project was to investigate for a possible LAIC (Lithosphere Atmosphere Ionosphere Coupling) by satellite Earth observations (Magnetic field, electron density, ...) combined with ground-based observations (seismicity, GNSS,...). Since Nov 2016, I have participated in the Limadou-science project founded by ASI (Italian Space Agency) to prepare the analysis of CSES (China Seismo Electromagnetic Satellite)

and search for a potential seismic source inside ionospheric measurement of electron density and magnetic field.

#### ATTIVITÀ DIDATTICA A LIVELLO UNIVERSITARIO IN ITALIA O ALL'ESTERO

- **2020-present** Tutoring of master and Ph.D. students. The guidance concern the optimization suggestion and revision of research work, paper preparation and writing, and finally, thesis preparation.

#### DOCUMENTATA ATTIVITÀ DI FORMAZIONE O DI RICERCA PRESSO QUALIFICATI ISTITUTI ITALIANI O STRANIERI;

- **01/11/2019-01/11/2021** Collaboration agreement with INGV (Italian National Institute of Geophysics and Volcanology) to study the preparatory phase of earthquakes in the multidisciplinary group coordinated by prof. Angelo De Santis.

#### REALIZZAZIONE DI ATTIVITÀ PROGETTUALE

- **2021-2022** Leader of **Postdoc project “Research on multiparametric anomalies in Lithosphere-Atmosphere-Ionosphere before the earthquakes”** (Grant number: 2021M691190) funded by the Chinese Postdoctoral Science Foundation (80'000 CNY)
- **2016-2017** –Member of **SAFE** (SwArm For Earthquake study) project and its extension **e-SAFE** founded by ESA. The aim of the project was to investigate a possible LAIC (Lithosphere Atmosphere Ionosphere Coupling) by satellite Earth observations (Magnetic field, electron density, ...) combined with ground-based observations (seismicity, GNSS,...). The role in the project was data analysis, software development, and formal investigation.
- **Nov/2016-May/2022** – Member of the **Limadou-science** and its extension **Limadou-Science+** projects founded by ASI (Italian Space Agency) to prepare the analysis of CSES-01 (China Seismo Electromagnetic Satellite) and search for a potential seismic source inside ionospheric measurement of electron density and magnetic field. The role in the project was data analysis, software development, and formal investigation.

#### ORGANIZZAZIONE, DIREZIONE E COORDINAMENTO DI GRUPPI DI RICERCA NAZIONALI E INTERNAZIONALI, O PARTECIPAZIONE AGLI STESSI

- **2023-present** Leader of the **International Team 23-583** “Investigation of the Lithosphere Atmosphere Ionosphere Coupling (LAIC) Mechanism before the Natural Hazards” supported by ISSI (Bern, Switzerland) and ISSI-BJ (Beijing, China) led by D. Marchetti and E. Ghamry. Website: <https://teams.issibern.ch/ionospherecoupling/>
- **2022/06-present** Core member of **International Team 553** founded by International Space Science Institute (ISSI)-Bern/Beijing about “**CSES and Swarm Investigation of the Generation Mechanisms of Low Latitude Pi2 Waves**” led by prof. Essam Ghamry and prof. Zeren Zhima.

#### ALTRI RUOLI ED ATTIVITÀ DI RICERCA

- **2021/01-10/2023** **Guest Editor** of the Special Issue of Remote Sensing (MDPI) “Remote Sensing Observations to Improve Knowledge of Lithosphere–Atmosphere–Ionosphere Coupling during the Preparatory Phase of Earthquakes” with 15 published papers. [https://www.mdpi.com/journal/remotesensing/special\\_issues/LAIC\\_EarthquakePrecursors](https://www.mdpi.com/journal/remotesensing/special_issues/LAIC_EarthquakePrecursors)
- **2023/01-present** **Co-Guest Editor** of the Special Issue of Remote Sensing (MDPI) “Remote Sensing Data Application for Early Warning System” and Special Issue of Atmosphere (MDPI) “Detection of Perturbations Associated with Earthquakes during the LAIC Process Based on the Multi-Source Data”
- **2019-present** Member of the **Reviewer Board** of Remote Sensing (MDPI)
- **2020-present** Member of the **Topical Advisory Panel** of Remote Sensing (MDPI)

- **2018/08/26-30** Scientific visit to Jilin University (Changchun, China), invited by prof. Zhu Kaiguang, as an “expert in Swarm data analysis related to earthquake occurrence”
- **2019-09-1-4** II Scientific visit to Jilin University (Changchun, China), invited by prof. Zhu Kaiguang.
- **2014** Professor for adult education “Università 50 e più” (“Over 50 years old people University”) of a small astronomy course (4 lessons) titled “The story of the universe”, about the formation of the universe, matter, galaxies and stars and the Plank satellite to study cosmic microwave background.

## ATTIVITÀ DI RELATORE A CONGRESSI E CONVEGNI NAZIONALI E INTERNAZIONALI

### 2023

- American Geophysical Union (AGU) 2023 Annual meeting 11-15 December 2023, San Francisco (USA) – Poster: “The Geophysical Coupling Before Earthquakes From Multiparametric Studies” (Abstract ID: NH33E-0851)
- 13<sup>th</sup> Swarm Data Quality Workshop, 10-12 October 2023, ESA-ESRIN, Frascati (Rome, Italy). Two oral presentations titled “Comparison of possible pre-earthquake magnetic (and Ne) anomalies with acceleration data (ACC) product.” and “Ten years of Swarm observations of earthquakes: from single case study to large statistics as a function of focal mechanism and sea/land location of seismic events.”
- The 6<sup>th</sup> International Workshop of CSES Mission, 17-21 September 2023, Beijing (China), presentation “CSES and Swarm satellites to understand the Lithosphere Atmosphere and Ionosphere Coupling mechanisms”
- Japan Geosciences Union (JpGU) Union Meeting 2023, 21 May 2023, presentation MIS04-14: “Mechanisms of lithosphere, atmosphere and ionosphere couplings before earthquakes and volcanos: differences and analogies”
- European Geosciences Union (EGU) General Assembly 2023, 23-28 April 2023, presentation (EGU23-4719): “10 years of observations of earthquakes with Swarm satellites: results and open questions” (first author: Zhu K., presented by D. Marchetti). Second presentation (EGU23-2187): “Possible Lithosphere Atmosphere Ionosphere Coupling before 19 September 2021 La Palma volcano eruption” by D. Marchetti. Co-Chair session NH4.1 Short-term Earthquakes Forecast (StEF) and multi-parametric time-Dependent Assessment of Seismic Hazard (t-DASH)

### 2022

- American Geophysical Union (AGU) 2022 Annual meeting 12-16 December 2022 – Virtual. Poster: “Lithosphere, atmosphere and ionosphere couplings before natural hazards: is there one way or more ways?”
- 2022 International Conference on Geoscience and Remote Sensing (GeoRS2022), 23-25 November 2022, **invited talk** “Remote sensing data to investigate the preparation of earthquakes” and chair of “Remote Sensing” session.
- ASC 2022, Oral recorded presentation “A multiparametric and multisatellite investigation of possible pre- and co- seismic effects of Mw=7.7 Jamaica earthquake occurred on 28 January 2020”, 11 October 2022
- EMSEV 2022, Oral remote presentation titled “Possible Lithosphere, atmosphere and Ionosphere couplings observed before large earthquakes in the last years”, 24 August 2022
- European Geosciences Union (EGU) General Assembly 2022, 27 May 2022, (EGU22-3337): short remote presentation: “Multiparametric and multilayer investigation of global earthquakes in the World by a statistical approach” by D. Marchetti.
- Japan Geosciences Union (JpGU) Union Meeting 2022, 22 May 2022, **invited talk** MS10-02: “A statistical approach to discover the location and focal mechanism role of earthquakes on possible

seismo-ionospheric disturbances” and standard presentation MS10-12 “Geophysical multilayer and multi-parametric approach applied to study the earthquake preparatory phase: three case studies”

## 2021

- American Geophysical Union (AGU) 2021 Annual meeting 13-17 December 2021 – Virtual. Poster: “Geophysical Multilayer and multi-instrument investigation of the earthquake preparatory phase: the case studies of 2018 Palu (Indonesia) Mw=7.5, 2019 Ridgecrest (California, USA) Mw=7.1, and 2020 Jamaica Mw=7.7.”
- 5<sup>th</sup> CSES Workshop, 22-25 October 2021, Guiyang (China). Presentation “CSES satellite to search for seismo-ionospheric disturbances before medium-large earthquakes”.
- Swarm 11<sup>th</sup> Data Quality Workshop, 11-15 October 2021, Athens (Greece) hybrid. Virtual presentation “Comparison of Swarm and CSES to study ionospheric disturbances before or during the occurrence of medium / large earthquakes”.
- IAGA-IASPEI, 25 August 2021 - virtual presentation “A multiparametric and multisatellite investigation of possible seismic precursors in lithosphere, atmosphere and ionosphere of the 28 January 2020 Mw=7.7 Jamaica earthquake”.
- The 15th China International Geo-Electromagnetic Workshop, July 17-19, 2021, Changchun (China), Oral presentation: “Worldwide Statistical Correlation between ionospheric electromagnetic satellite disturbances and M5.5+ shallow earthquakes”.
- The 9<sup>th</sup> Conference of Geophysical Technology, CGS (CGT2021) 21-23 May 2021, Wuhan, China. Oral Presentation: “Geophysical Multilayer investigation of the earthquake preparatory phase: the case studies of 2018 Palu (Indonesia) Mw=7.5, 2019 Ridgecrest (California, USA) Mw=7.1, and 2020 Jamaica Mw=7.7”
- European Geosciences Union (EGU) General Assembly 2021, 30 Apr 2021, Solicited contribution (EGU2021-15456): virtualPICO: “A preliminary multiparametric and multi-satellite investigation of possible seismic precursors of Mw=7.7 Jamaica earthquake occurred on 28 January 2020” by D. Marchetti.
- Seismological Society of America (SSA2021) – 22 April 2021, Virtual. Oral presentation: “CSES Electron Density background characterization and preliminary investigation of possible Ne increase before earthquake occurrence.”

## 2020

- American Geophysical Union (AGU) 2020 Annual meeting – Virtual. Poster: “Systematic worldwide analysis of physical and chemical atmospheric parameters before the largest earthquakes in the last four decades.” and contribution to the poster by D. Sabbagh: “Satellite electron density variations derived with different backgrounds in different solar conditions” and oral by A. De Santis: “Magnetic field and electron density as ionospheric precursors of earthquakes from satellites”.
- 106<sup>o</sup> National Conference of SIF (Italian Society of Physics), September 2020, Virtual conference. Oral pre-recorded presentation: “A multi-parametric approach to study the preparation phase of an earthquake: The 2016--2017 Amatrice--Norcia seismic sequence and other world case studies.” Available at: <https://agenda.infn.it/event/23656/contributions/120547/> Contributions in the works presented by A. De Santis “Worldwide statistical correlation analysis of strong earthquakes and ionospheric electron density anomalies as observed by CSES.” and by L. Spogli “The ionospheric response over Brazil to the August 2018 geomagnetic storm as probed by CSES-01 and Swarm satellites and ground-based observations.”
- European Geosciences Union (EGU) General Assembly 2020, Solicited contribution (EGU2020-19809): “Systematic worldwide statistical correlation of physical and chemical atmospheric parameters before large earthquakes in the last four decades” by D. Marchetti, and co-author of EGU2020-20281, EGU2020-22588 and EGU2020-13140.

## 2019

- GNGTS - Italy, Rome, Italy, 2019-11-14. Oral presentation: “The multiparametric study of the preparation phase of an earthquake: the Italian case study of Amatrice-Norcia 2016-2017 seismic sequence”
- The 1<sup>st</sup> International Symposium On Geo-Hazards Perception, Cognition And Prediction & the 4<sup>th</sup> International Workshop Of China Seismo-Electromagnetic Satellite Mission, Changsha, China, 2019-10-17/20. Oral presentation: “A multiparametric approach to study the preparatory phase of the 2018 Mw=7.5 Indonesia earthquake”
- ESA Living Planet Symposium, Milan (Italy) from 13 to 17 May 2019. Posters: “A multiparametric approach to study the preparatory phase of the Mw=7.5 Indonesia earthquake occurred on 28 September 2018” and “A comparison of ionospheric disturbances before the occurrence of large earthquakes between Swarm and CSES satellites”
- European Geosciences Union (EGU) General Assembly 2019, Vienna, Austria, **highlighted** oral presentation: “The preparatory phase of the Mw=7.5 Indonesia earthquake occurred on 28 September 2018”.
- Final Review Meeting of e-SAFE 2019-02-11/12 at INGV, Rome, Italy. Oral Presentation “Analysis and Validation Correlation Analysis with complementary dataset”

## 2018

- 3<sup>RD</sup> CSES Workshop, Beijing, 2018-11-16/18. Oral presentations: “Pre-earthquake anomalies in magnetic data by the High Precision Magnetometer (HPM) and in electron density by Langmuir Probe (LAP) onboard CSES Zhangheng-01 satellite” and “Pre-earthquake anomaly detection by means of deep analysis of Swarm three-satellite ionospheric magnetic and electron density data”
- 4th International Conference on Continental Earthquake, Chengdu (China) 12-14 May 2018. Oral presentation: “Electromagnetic and climatological anomalies from ground and space before 2016-2017 Central Italy seismic sequence” and co-author of posters: “SAFE (SwArm for Earthquake study) Project: An integrated system of earthquake physics study from ground to space” and “Pre-earthquake climatological anomalies: CAPRI algorithm as robust procedure assessment and development analysis”
- European Geosciences Union (EGU) General Assembly 2018, Vienna, Austria. Poster (first author): “A multi-parametric climatological approach to study the preparatory phase of strong earthquakes” and co-author of poster “Swarm satellites EM monitoring for pre-earthquake anomaly detection?”.
- IAGA-Italia, INGV, Rome 21 and 22 Feb 2018 – Presentation: “Anomalie elettromagnetiche osservate da satellite e da terra prima della sequenza sismica che ha colpito l’Italia centrale nel 2016-2017 (Amatrice, Norcia, Visso e Campotosto)” (electromagnetic anomalies before Central Italy seismic sequence 2016-2017)
- European Seismological Commission Malta, 2018, poster “European Seismological Commission Trieste, 2016 from 4 to 11 September 2016, poster “Study of the preparatory phase of strong earthquakes by means of a multi-parametric climatological approach” presented by A. De Santis
- EMSEV, Potenza, 2018 two posters “Pre-earthquake chain processes in occasion of the 2016-2017 seismic sequence in Central Italy from ground and space observations” and “New algorithms as robust procedure for Geohazards climatological precursor assessment” presented by A. Piscini

## 2017

- XIV International Symposium of University Professors. “The Third mission of University in Europe For a human and global development on the occasion of 60th anniversary of Treaties of Rome.

Roma, June 22nd-24nd 2017

- AGU 12 Dec. 2017, New Orleans, Oral presentation by A. De Santis “Pre- earthquake Multiparameter analysis of the 2016 Amatrice-Norcia (Central Italy) seismic sequence: A case study for the application of the SAFE project concepts”
- ISPRS Joint Conference, Tehran – Iran, 10 October 2017, “Statistical validation of Lithosphere-Ionosphere-Atmosphere Coupling before large earthquakes by analysing 3.5 years of Swarm satellite electromagnetic data” presented by A. De Santis
- Pre-earthquake features, Day dedicated to Amatrice-Norcia earthquakes, INGV Rome, Italy 26 Jun. 2017. Oral presentation by A. De Santis “Pre-earthquake Multiparameter analysis of the 2016 Amatrice-Norcia (Central Italy) seismic sequence”
- European Geosciences Union General Assembly 2017, Vienna, Austria. Poster: “An integrated approach to pre-earthquake physics study: some results from the SAFE Project”, “A new multi-parametric climatological approach to the study of the earthquake preparatory phase: the 2016 Amatrice-Norcia (Central Italy) seismic sequence” presented by A. De Santis and poster “Worldwide correlation between earthquakes and electromagnetic anomalies from satellites” presented by M. Taroni.
- Fourth Swarm Science Meeting & geodetic missions workshop, Banff, Alberta (Canada) from 20 to 24 March 2017. Oral presentation by A. De Santis “Swarm satellite data analysis for earthquake preparatory phase study” and poster “NeSTAD: a tool to tag electron density anomalies with Swarm data” presented by L. Spogli

## 2016

- Conference for general public “I pianeti extra-solari: dai metodi per scoprirli alla domanda di sempre: Siamo soli nell’universo?» (extrasolar planets: detection methods... Are we alone in the universe?) at “L’Accademia delle Stelle” on 25th of September 2016
- ESA Living Planet Symposium, Prague (Czech Republic) from 9 May to 11 May 2016.
- Meeting pre-AGU 11 December 2016, San Francisco oral presentation by A. De Santis: “Preliminary analysis of the pre-earthquake features of the 2016 Amatrice- Norcia (Central Italy) seismic sequence”
- European Seismological Commission Trieste, 2016 from 4 to 11 September 2016, poster “Earthquakes from space: examples of electromagnetic anomalies before large earthquakes detected by the ESA Swarm satellite mission” presented by A. De Santis and oral presentation by A. De Santis with title “SAFE Project: An improved integrated system of earthquake physics study from ground and satellite observations”
- European Geosciences Union General Assembly 2016, Vienna, Austria, 2016. Poster: “SAFE Project: An integrated system of earthquake physics study from ground and space observations” presented by A. De Santis.

## 2015

- 3rd SOLARNET Workshop on “Polarization in the Sun the Solar System and Beyond” held in Granada (Spain) from May 24th to 28th, 2015
- 101° National Congress of SIF (Italian Physical Society) held in Rome from September 21th to 25th, 2015
- VI school on "Detectors and Electronics for High Energy Physics, Astrophysics, Space and Medical applications" and RADFEC 2015 (topic: Radiation effects on Components and Systems) at LNL Legnaro National Laboratory of INFN (Padova) from 23 to 27 March 2015

## 2014

- Video presentation at “International Conference of new Horizons in Education” titled “A

physics exhibit to show the effect of the aerosol in the atmosphere on electromagnetic wave propagation”

- “International Journal of Arts & Sciences multidisciplinary conference” at The American University of Rome, Italy 28th to 31st October 2014 with presentation of the didactic exhibit to show the effect of the aerosol in the atmosphere on electromagnetic wave propagation.

## 2013

- “Second Roma Workshop on Past and Present Perception of Science - A century of research on cosmic rays and future perspective” - Rome, 19 April 2013. Presentation of a poster titled “Cosmic ray flux variation with altitude measured by a didactic experiment”.
- “Topical Workshop on Electronics for particle physics” TWEPP, 23-27 September 2013, Perugia Italy, Presentation of a poster titled “Front End Strategy for the DAQ system of kinetic inductance detector”.

## CONSEGUIMENTO DI PREMI E RICONOSCIMENTI NAZIONALI E INTERNAZIONALI PER ATTIVITÀ DI RICERCA

- **Sep 2023** Certificate as a “outstanding foreigner expert” of Jilin Province (China), issued by Jilin Province of China
- **27-May-2021** **Conference award:** “Best Young scientist presentation at EGU 2021” from EMSEV committee for “A preliminary multiparametric and multi-satellite investigation of possible seismic precursors of Mw=7.7 Jamaica earthquake occurred on 28 January 2020”

## PRODUZIONE SCIENTIFICA

### PUBBLICAZIONI SCIENTIFICHE

Peer-reviewed publications:

1. Fan, Mengxuan; Zhu, Kaiguang \*; De Santis, Angelo; **Marchetti, Dedalo**; Cianchini, Gianfranco; Wang, Ting; Zhang, Yiqun; Zhang, Donghua; Cheng, Yuqi. Exploration of the 2021 Mw 7.3 Maduo Earthquake by Fusing the Electron Density and Magnetic Field Data of Swarm Satellites. IEEE Transactions on Geoscience and Remote Sensing, doi: 10.1109/TGRS.2024.3361875
2. Wenqi Chen, **Dedalo Marchetti \***, Kaiguang Zhu, Dario Sabbagh, Rui Yan, Zeren Zhima, Xuhui Shen, Yuqi Cheng, Mengxuan Fan, Siyu Wang, Ting Wang, Donghua Zhang, Hanshuo Zhang, and Yiqun Zhang. CSES-01 Electron Density Background Characterisation and Preliminary Investigation of Possible Ne Increase before Global Seismicity. Atmosphere, 2023, 14, 1527. <https://doi.org/10.3390/atmos14101527> (number of citations from Scopus: 2)
3. Zhang Hanshuo, Zhu Kaiguang, Cheng Yuqi \*, **Marchetti Dedalo \***, Chen Wenqi, Fan Mengxuan, Wang Siyu, Wang Ting, Zhang Donghua and Zhang Yiqun. Atmospheric and Ionospheric Effects of La Palma Volcano 2021 Eruption. Atmosphere 2023, 14, 1198. <https://doi.org/10.3390/atmos14081198>.
4. Han, Chengcheng, Rui Yan\*, **Dedalo Marchetti**, Weixing Pu, Zeren Zhima, Dapeng Liu, Song Xu, Hengxin Lu, and Na Zhou. 2023. "Study on Electron Density Anomalies Possibly Related to Earthquakes Based on CSES Observations" Remote Sensing 15, 13, 3354. <https://doi.org/10.3390/rs15133354> (number of citations from Scopus: 2)
5. Dario Sabbagh\*, Alessandro Ippolito, **Dedalo Marchetti**, Loredana Perrone, Angelo De Santis, Saioa A. Campuzano, Gianfranco Cianchini, Alessandro Piscini. “Satellite-based electron density background definition at mid-latitudes and comparison with IRI-2016 model under different solar conditions”. Advances in Space Research. <https://doi.org/10.1016/j.asr.2023.05.029> (number of citations from Scopus: 1)
6. Akhoondzadeh, Mehdi\*, and **Dedalo Marchetti**. 2023. "Study of the Preparation Phase of



- Turkey's Powerful Earthquake (6 February 2023) by a Geophysical Multi-Parametric Fuzzy Inference System" Remote Sensing 15, no. 9: 2224. <https://doi.org/10.3390/rs15092224> (number of citations from Scopus: 5)
7. Zhang, Yiqun, Ting Wang, Wenqi Chen, Kaiguang Zhu, **Dedalo Marchetti\***, Yuqi Cheng, Mengxuan Fan, Siyu Wang, Jiami Wen, Donghua Zhang, and Hanshuo Zhang. 2023. "Are There One or More Geophysical Coupling Mechanisms before Earthquakes? The Case Study of Lushan (China) 2013" Remote Sensing 15, no. 6: 1521. <https://doi.org/10.3390/rs15061521>. (number of citations from Scopus: 7)
  8. **Marchetti, Dedalo**, Kaiguang Zhu\*, Laura Marchetti, Yiqun Zhang, Wenqi Chen, Yuqi Cheng, Mengxuan Fan, Siyu Wang, Ting Wang, Jiami Wen, Donghua Zhang, and Hanshuo Zhang. 2023. "Quick Report on the ML = 3.3 on 1 January 2023 Guidonia (Rome, Italy) Earthquake: Evidence of a Seismic Acceleration" Remote Sensing 15, no. 4: 942. <https://doi.org/10.3390/rs15040942>. (number of citations from Scopus: 4)
  9. De Santis A. \*, Perrone L., Calcara M., Campuzano S.A., Cianchini G., D'Arcangelo S., Di Mauro D., **Marchetti D.**, Nardi A., Orlando M., Piscini A., Sabbagh D., Soldani M. A comprehensive multiparametric and multilayer approach to study the preparation phase of large earthquakes from ground to space: The case study of the June 15 2019, M7.2 Kermadec Islands (New Zealand) earthquake, Remote Sensing of Environment, 283, 2022, 113325, <https://doi.org/10.1016/j.rse.2022.113325> (number of citations from Scopus: 13)
  10. **Marchetti, Dedalo**, Kaiguang Zhu\*, Hanshuo Zhang, Zeren Zhima, Rui Yan, Xuhui Shen, Wenqi Chen, Yuqi Cheng, Xiaodan He, Ting Wang, Jiami Wen, Donghua Zhang, and Yiqun Zhang. 2022. "Clues of Lithosphere, Atmosphere and Ionosphere Variations Possibly Related to the Preparation of La Palma 19 September 2021 Volcano Eruption" Remote Sensing 14, no. 19: 5001. <https://doi.org/10.3390/rs14195001> (number of citations from Scopus: 8)
  11. Mengxuan Fan, Kaiguang Zhu\*, Angelo De Santis, **Dedalo Marchetti**, Gianfranco Cianchini, Alessandro Piscini, Xiaodan He, Jiami Wen, Ting Wang, Yiqun Zhang, and Yuqi Cheng. "Analysis of Swarm Satellite Magnetic Field Data for the 2015 Mw 7.8 Nepal Earthquake Based on Nonnegative Tensor Decomposition," in IEEE Transactions on Geoscience and Remote Sensing, vol. 60, pp. 1-19, 2022, Art no. 2006119, DOI: 10.1109/TGRS.2022.3195726. (number of citations from Scopus: 5)
  12. D'Arcangelo, S. \*; Bonforte, A.; De Santis, A.; Maugeri, S.R.; Perrone, L.; Soldani, M.; Arena, G.; Brogi, F.; Calcara, M.; Campuzano, S.A.; Cianchini, G.; Del Corpo, A.; Di Mauro, D.; Fidani, C.; Ippolito, A.; Lepidi, S.; **Marchetti, D.**; Nardi, A.; Orlando, M.; Piscini, A.; Regi, M.; Sabbagh, D.; Zhima, Z.; Yan, R. A Multi-Parametric and Multi-Layer Study to Investigate the Largest 2022 Hunga Tonga–Hunga Ha'apai Eruptions. Remote Sens. 2022, 14, 3649. <https://doi.org/10.3390/rs14153649> (number of citations from Scopus: 8)
  13. Akhoondzadeh, M.; **Marchetti, D.**\* Developing a Fuzzy Inference System Based on Multi-Sensor Data to Predict Powerful Earthquake Parameters. Remote Sens. 2022, 14, 3203. <https://doi.org/10.3390/rs14133203> (number of citations from Scopus: 11)
  14. **Marchetti, D.**; De Santis, A.; Campuzano, S.A.; Zhu, K. \*; Soldani, M.; D'Arcangelo, S.; Orlando, M.; Wang, T.; Cianchini, G.; Di Mauro, D.; Ippolito, A.; Nardi, A.; Sabbagh, D.; Chen, W.; He, X.; Shen, X.; Wen, J.; Zhang, D.; Zhang, H.; Zhang, Y.; Zeren, Z. Worldwide Statistical Correlation of Eight Years of Swarm Satellite Data with M5.5+ Earthquakes: New Hints about the Preseismic Phenomena from Space. Remote Sens. 2022, 14, 2649. <https://doi.org/10.3390/rs14112649> (number of citations from Scopus: 19)
  15. Akhoondzadeh, M.; De Santis, A. \*; **Marchetti, D.**; Wang, T. Developing a Deep Learning-Based Detector of Magnetic, Ne, Te and TEC Anomalies from Swarm Satellites: The Case of Mw 7.1 2021 Japan Earthquake. Remote Sens. 2022, 14, 1582. <https://doi.org/10.3390/rs14071582> (number of citations from Scopus: 13)
  16. Akhoondzadeh M, De Santis A \*, **Marchetti D** and Shen X (2022) Swarm-TEC Satellite



- Measurements as a Potential Earthquake Precursor Together With Other Swarm and CSES Data: The Case of Mw7.6 2019 Papua New Guinea Seismic Event. *Front. Earth Sci.* 10:820189. DOI: 10.3389/feart.2022.820189 (number of citations from Scopus: 14)
17. Xiong, P.; **Marchetti, D.**; De Santis, A.; Zhang, X.; Shen, X. \*. SafeNet: SwArm for Earthquake Perturbations Identification Using Deep Learning Networks. *Remote Sens.* 2021, 13, 5033. <https://doi.org/10.3390/rs13245033> (number of citations from Scopus: 10)
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Data

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