

PERSONAL INFORMATION

Silvano Fortunato Dal Sasso



Affiliation

University of Basilicata (UNIBAS)
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Sex Male | Date of birth 02/12/1979 | Nationality Italian

Enterprise	University	EPR
☐ Management Level	☒ Associate Professor	☐ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator

WORK EXPERIENCE

From 1 st July 2025	Associate Professor for the scientific disciplinary sector CEAR-01/B (Hydraulic and marine contructions and hydrology) at the Department for Humanistic, Scientific, and Social Innovation (DIUSS), University of Basilicata (UNIBAS).
From 1 st July 2022 to 30 June 2025	Assistant Professor for the scientific disciplinary sector CEAR-01/B (Hydraulic and marine contructions and hydrology) at the Department for Humanistic, Scientific, and Social Innovation (DIUSS), University of Basilicata (UNIBAS).
From April 2016 to February 2022	Research Fellow for the scientific disciplinary sector CEAR-01/B (Hydraulic and marine contructions and hydrology) at the Department of European and Mediterranean Cultures (DiCEM), University of Basilicata (UNIBAS).
From 2014 to today	Collaborator in various projects between the Consortium of Hydrology (CINID) and local authorities for the management of the environment and water resources.
From Jan 2014 to March 2016	Research activity at the Fondazione Politecnico di Milano (FPM). 20133 Milano (Italy), University of Basilicata.
From 2012 to 2014	Academic tutor in the Master "ESPRI - Esperto in Previsione/Prevenzione Rischio idrogeologico" at University of Calabria for the Consortium of Hydrology (CINID). Via dell'Ateneo Lucano, Potenza.

EDUCATION AND TRAINING

February 2012	PhD in "Methods and Technologies for Environmental Monitoring" with a thesis entitled "Un approccio metodologico e modellistico alla simulazione della dinamica dei corsi d'acqua interessati da 'morfoinvasione' da frana". Unibas
October 2010 - March 2011	Visiting Researcher at Sediment Transport Research Group (GITS), Technical University of Catalonia (UPC), Barcelona - Spain.
Academic year 2007/2008	Degree in Environmental Engineering (110/110 cum laude), Unibas

WORK ACTIVITIES

Awards

Best thesis award for the thesis entitled "Valutazione del trasporto solido in alveo alluvionato largo: applicazione al tratto medio-vallivo del fiume Basento". AATO - Basilicata Servizio Idrico Integrato - Faculty of Engineering Of the University of Basilicata.

Editorial activity

Review Editor on the Editorial Board of Unmanned Aerial System (UASs and UAVs). Journal Frontiers in Remote Sensing (MDPI). Reviewer for different international technical journals. Guest Editor of the Special Issue "UAS and Satellite-Based Remote Sensing for Hydrological Observations and Applications" in Hydrology.

Guest editor della Special Issue dal titolo "UAS and Satellite-Based Remote Sensing for Hydrological Observations and Applications" nella rivista Hydrology. Co-Guest Editor: Laszlo Bertalan.

Convener activity

From 2020 co-convener of EGU session entitled "HS1.1 - Advances in river monitoring and modelling for a climate emergency: data-scarce environments, real-time approaches, inter-comparison of innovative and classical frameworks, uncertainties, harmonisation of methods and good practices". EGU General Assembly, Vienna - Austria.

ADDITIONAL INFORMATION

Publications

More than 70 scientific contributions among which 25 on peer reviewed journals.

Scopus: 24 documents, 475 citations, h-index 13

Google Scholar: 25 documents, 706 citations, h-index 15

- Rondinone, M.; Dal Sasso, S.F.; Aung, H.H.; Contillo, L.; Dimola, G.; Schiattarella, M.; Fiorentino, M.; Telesca, V. Assessing Flood and Landslide Susceptibility Using XGBoost: Case Study of the Basento River in Southern Italy. *Appl. Sci.* 2025, 15, 5290.
- Albano R., Limongi C., Dal Sasso S.F., Mancusi L., Adamowski J.F. (2024). Flood scenario spatio-temporal mapping via hydrological and hydrodynamic modelling and a remote sensing dataset: A case study of the Basento river (Southern Italy). *International Journal of Disaster Risk Reduction*.
- Pizarro A., Valera-Gran D., Navarrete-Muñoz E.-M., Dal Sasso S.F. (2024). The Use of Unmanned Aerial Systems for River Monitoring: A Bibliometric Analysis Covering the Last 25 Years. *Hydrology* 2024, 11, 80.
- Ljubičić R., Dal Sasso S.F., Zindović B. (2024). SSIMS-Flow. Image velocimetry workbench for open-channel flow rate estimation. *Environmental Modelling & Software* 2024, 173, 105938.
- Pizarro A., Dal Sasso S.F., Peña-Haro S., Manfreda S. (2024). Urban river management by innovative monitoring. In *Managing Urban Rivers* (pp. 315-331). Elsevier.
- Strelnikova D., Perks M.T., Dal Sasso S.F., Pizarro A. (2023). River Flow Monitoring with Unmanned Aerial System; Elsevier: Amsterdam, The Netherlands; pp. 231-269.
- Pizarro A., Dal Sasso S.F., Manfreda S. (2022). VISION: Video Stabilisation using automatic features selection for image velocimetry analysis in rivers. *SoftwareX*, Volume 19, 101173, 2022.
- Paridad P., Dal Sasso S.F., Pizarro A., Mita L., Fiorentino M., Margiotta M.R., Faridani F., Farid A., Manfreda S. (2022). Estimation of soil moisture from UAS platforms using RGB and thermal imaging sensors in arid and semi-arid regions. *ACTA Horticulture*, 1335, 339-348.
- Ljubičić R., Strelnikova D., Perks M.T., Eltner A., Peña-Haro S., Pizarro A., Dal Sasso S.F., Scherling U., Vuono P., Manfreda S. (2021). A comparison of tools and techniques for stabilising unmanned aerial system (UAS) imagery for surface flow observations. *Hydrology and Earth System Sciences*, 25, 5105-5132.
- Dal Sasso S.F., Pizarro A., Manfreda S. (2021). Recent Advancements and Perspectives in UAS-Based Image Velocimetry. *Drones* 2021, 5, 81.
- Dal Sasso S.F., Pizarro A., Pearce S., Maddock I., Manfreda S. (2021). Increasing LSPIV performances by exploiting the seeding distribution index at different spatial scales. *Journal of Hydrology*, 598, 126438.
- Pizarro A., Dal Sasso S.F., Manfreda S. (2020). Refining image-velocimetry performances for streamflow monitoring: Seeding metrics to errors minimisation. *Hydrological Processes*, 1-9, 2020.
- Paruta A., Ciraolo G., Capodici F., Manfreda S., Dal Sasso S.F., Zhuang R., Romano N., Nasta P., Ben-Dor E., Francos N., Zeng Y., Maltese A. (2020). Geostatistical analysis and spatial interpolation of very high spatial resolution thermal inertia for mapping near-surface soil moisture in a small catchment. *IEEE Transactions on Geoscience and Remote Sensing*, pp. 1-18, 2020.
- Perks M., Dal Sasso S.F., Hauet A., Jamieson E., Le Coz J., Pearce S., Peña-Haro S., Pizarro A., Strelnikova D., Tauro F., Bomhof J., Grimaldi S., Goulet A., Hortobágyi B., Jodeau M., Käfer S., Ljubičić R., Maddock I., Mayr P., Paulus G., Pénard L., Sinclair L., Manfreda S. (2020). Towards harmonization of image velocimetry techniques for river surface velocity observations. *Earth System Science Data*, 12, 1545-1559.
- Dal Sasso S.F., Pizarro A., Manfreda S. (2020). Metrics for the Quantification of Seeding Characteristics to Enhance Image Velocimetry Performance in Rivers. *Remote Sensing*, 12(11), 1789.
- Su Z., Zeng Y., Romano N., Manfreda S., Francés F., Ben-Dor E., Szabó B., Vico G., Nasta P., Zhuang R., Francos N., Mészáros J., Dal Sasso S.F., Bassiouni M., Zhang L., Rwasoka D.T., Retsios B., Yu L., Blatchford M.L., Mannaerts C. (2020). An Integrative Information Aqueduct to Close the Gaps between Satellite Observation of Water Cycle and Local Sustainable Management of Water Resources. *Water* 2020, 12, 1495.
- Pizarro A., Dal Sasso S.F., Perks M., Manfreda S. (2020). Identifying the optimal spatial distribution of tracers for optical sensing of stream-surface flow. *Hydrology and Earth System Sciences*, 24(11), 5173-5185.
- Pearce S., Ljubičić R., Peña-Haro S., Perks M., Tauro F., Pizarro A., Dal Sasso S.F., Strelnikova D., Grimaldi S., Maddock I., Paulus G., Plavšić J., Prodanović D., Manfreda S. (2020). An Evaluation of Image Velocimetry Techniques under Low Flow Conditions and High Seeding Densities Using Unmanned Aerial Systems. *Remote Sensing*, 12, 232.
- Dal Sasso S.F., Pizarro A., Samela C., Mita L., Manfreda S. (2018). Exploring the Optimal Setup for Surface Flow Velocity Measurements using PTV. *Journal of Environmental Monitoring and Assessment*, 190:460.
- Manfreda S., Mita L., Dal Sasso S.F., Samela C., Mancusi L. (2018). Exploiting the use of physical information for the calibration of lumped hydrological models. *Hydrological Processes*, 32(10), 1420-1433.
- Dal Sasso S.F., Sole A., Bateman Pinzòn A., Medina V., Mirauda D., Volpe Plantamura A.,

- Giosa L., Guariglia A. (2015). Analysis of river bed dynamic evolution following a landslide dam. La Houille Blanche, n. 6, p. 88-95.
- Dal Sasso S.F., Sole A., Mirauda D., Volpe Pantamura A., Masi V. (2015). River bed dynamic evolution following landslide dam: a case study. Journal of Applied Water Engineering and Research, Volume 3, p. 67-79.
 - Dal Sasso S.F., Sole A., Bateman Pinzòn A., Medina V. (2014). Assessment methodology for the prediction of landslide dam hazard. Natural Hazards and Earth System Sciences (NHESS), 14, 557-567.

Matera, 01/07/2025

Prof. Silvano F. Dal Sasso



