

CURRICULUM VITAE di:

Nominativo	Giovanni Florio
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Posizione accademica

Macrosettore:	04/A - GEOSCIENZE
Settore Concorsuale:	04/GEOS-04 GEOFISICA (EX SC 04/A4)
Settore Scientifico Disciplinare:	GEOS-04/A
Qualifica:	Professore I Fascia
Anzianità nel ruolo:	01/04/2020
Sede Universitaria:	Università degli Studi di Napoli "Federico II"
Struttura di afferenza (dipartimento o altro)	Dipartimento di Scienze della Terra, dell'Ambiente e delle Risorse

Posizioni ricoperte precedentemente nel medesimo ateneo o in altri

Periodo	Fascia	Ateneo
01/07/1995	Ricercatore Universitario	Università degli Studi di Napoli Federico II
18/01/2005	Professore II Fascia	Università degli Studi di Napoli Federico II

Pubblicazioni Scientifiche

n. progr.	anno	Descrizione pubblicazione
1	2024	ACCOMANDO, F. & FLORIO, G., 2024. Drone-Borne Magnetic Gradiometry in Archaeological Applications. Sensors, 24, 4270. https://doi.org/10.3390/s24134270
2	2024	WANG D., WANG W., FEDI M. & FLORIO G., 2024. Exponential Approximate Invariance: mapping the depth to basement from gravity anomalies. IEEE Transactions on Geoscience and Remote Sensing, 62, 5918912, doi: 10.1109/TGRS.2024.3418615

3	2024	MAIOLINO M., FLORIO G., & FEDI M., 2024. Extremely Compact Sources (ECS): A New Potential Field Filtering Method. Scientific Reports 14 (1): 11950. https://doi.org/10.1038/s41598-024-62751-3 .
4	2023	ACCOMANDO F., BONFANTE A., BUONANNO M., NATALE J., VITALE S. & FLORIO G., 2023. The drone-borne magnetic survey as the optimal strategy for high-resolution investigations in presence of extremely rough terrains: The case study of the Taverna San Felice quarry dike. Journal of Applied Geophysics, Volume 217, 105186, https://doi.org/10.1016/j.jappgeo.2023.105186 .
5	2023	FLORIO G., FEDI M. & CELLA F., 2023. A fractional vertical derivative technique for regional-residual separation. Geophysical Journal International, Volume 232, Issue 1, January 2023, Pages 601–614, https://doi.org/10.1093/gji/ggac348
6	2023	VARFINEZHAD R., PARNOW S., FLORIO G., FEDI M. & VIZHEH M.M., 2023. DC resistivity inversion constrained by magnetic method through sequential inversion. Acta Geophysica, Volume 71, Issue 1, Pages 247 – 260, https://doi.org/10.1007/s11600-022-00909-1
7	2022	FLORIO G., PASSARO S., DE ALTERIIS G. & CELLA F., 2022. Magnetic anomalies of the Tyrrhenian Sea revisited: A processing workflow for enhancing the resolution of aeromagnetic data. Geosciences 2022, 12, Issue 10, 377. https://doi.org/10.3390/geosciences12100377
8	2022	FLORIO G., PAOLETTI V., NAPPI R., & CELLA F., 2022. Comment on “Gravity Modeling Reveals a Messinian Foredeep Depocenter beneath the Intermontane Fucino Basin (Central Apennines)” by Mancinelli et al., 2021, Tectonophysics, 839, 229540. https://doi.org/10.1016/j.tecto.2022.229540 .
9	2021	CELLA F., NAPPI R., PAOLETTI V. & FLORIO G., 2021. Basement Mapping of the Fucino Basin, Central Italy, by ITRESC Modelling of Gravity Data. Geosciences, 11, 398. https://doi.org/10.3390/geosciences11100398
10	2021	FLORIO G., MILANO M. & CELLA F., 2021. Gravity basement-depth mapping in seismogenic, fault-controlled basins: The case of the Middle Aterno Valley (Central Italy). Tectonophysics, doi:10.1016/j.tecto.2021.229044
11	2021	ACCOMANDO, F., VITALE, A., BONFANTE, A., BUONANNO, M. & FLORIO, G., 2021. Performance of Two Different Flight Configurations for Drone-Borne Magnetic Data. Sensors, 21, 5736. https://doi.org/10.3390/s21175736
12	2021	PARNOW S., OSKOOI B. & FLORIO G., 2021. Improved linear inversion of low induction-number electromagnetic data, Geophysical Journal International, 224, 3, 1505–1522, https://doi.org/10.1093/gji/ggaa531
13	2020	FLORIO G., 2020. The Estimation of Depth to Basement Under Sedimentary Basins from Gravity Data: Review of Approaches and the ITRESC Method, with an Application to the Yucca Flat Basin (Nevada). Surveys in Geophysics, 41(5), 935-961, https://doi.org/10.1007/s10712-020-09601-9
14	2019	FLORIO G., CELLA F., SPERANZA L., CASTALDO R., PIEROBON BENOIT R. & PALERMO R., 2019. Multiscale techniques for 3D imaging of magnetic data for archaeo-geophysical investigations in the Middle East: the case of Tell Barri (Syria). Archaeological Prospection, 26, 4, 379-395 https://doi.org/10.1002/arp.1751
15	2019	MILANO M., PIERRI I., FLORIO G., CELLA F. & FEDI M., 2019. Bouguer gravity field of the Tuscan Archipelago (central Italy),

		Journal of Maps, 15:2, 751-758, DOI:10.1080/17445647.2019.1669499
16	2018	FLORIO G., 2018. Mapping the Depth to Basement by Iterative Rescaling of Gravity or Magnetic Data Journal of Geophysical Research – Solid Earth, 123, 9, 9101-9120. https://doi.org/10.1029/2018JB015667
17	2018	DI MASSA D., FEDI M., FLORIO G., VITALE A., VIEZZOLI A. E KAMINSKI V., 2018. Joint interpretation of AEM and aeromagnetic data acquired over the Drybones kimberlite, NWT (Canada). Journal of Applied Geophysics, 158, 48 –56. https://doi.org/10.1016/j.jappgeo.2018.07.004
18	2018	FLORIO G. E LO RE D., 2018. Terracing of potential fields by clustering methods. GEOPHYSICS, 83, 4, G47-G58. https://doi.org/10.1190/geo2017-0140.1
19	2018	FEDI M., CELLA F., D'ANTONIO M., FLORIO G., PAOLETTI V. E MORRA V., 2018. Gravity modeling finds a large magma body in the deep crust below the Gulf of Naples, Italy. Scientific Reports 8:8229, DOI:10.1038/s41598-018-26346-z
20	2018	FLORIO G. E FEDI M., 2018. Depth estimation from downward continuation: An entropy-based approach to normalized full gradient. GEOPHYSICS, 83(3), J33-J42. https://doi.org/10.1190/geo2016-0681.1
21	2018	VITALE A., DI MASSA D., FEDI M. E FLORIO G., 2018. A method for inversion of 1D vertical soundings of gravity anomalies. GEOPHYSICS, 83(2), G15–G23, 10.1190/GEO2017-0186.1
22	2017	PAOLETTI V., FEDI M. E FLORIO G., 2017. The structure of the Ischia Volcanic Island from magnetic and gravity data. Annals of Geophysics, 60, Suppl. to 6, GM674., doi: 10.4401/ag-7550
23	2017	FEDI M., CELLA F., FLORIO G., LAMANNA M. E PAOLETTI, V. 2017. Geomagnetometry for Archaeology, in N. Masini, F. Soldovieri (eds.), Sensing the Past, Geotechnologies and the Environment Vol. 16, Springer International Publishing, 203-230, DOI 10.1007/978-3-319-50518-3_10
24	2016	FEDI M., PAOLETTI, V. E FLORIO G., 2016. Inversion of Gravity Gradient Tensor Data: does it provide better resolution?, Geophysical Journal International, 205(1), 192-202 · doi: 10.1093/gji/ggw003
25	2016	DI MASSA D., FLORIO G. E VIEZZOLI A., 2016. Adaptive sampling of AEM transients, Journal of Applied Geophysics, 125,45-55, doi:10.1016/j.jappgeo.2016.01.002
26	2016	LO RE D., FLORIO G., FERRANTI L., IALONGO S. E CASTIELLO G., 2016. Self-constrained inversion of microgravity data along a segment of the Irpinia fault, Journal of Applied Geophysics, 124, 148–154 doi: 10.1016/j.jappgeo.2015.12.002
27	2015	NEGRI S., MARGIOTTA S., QUARTA T.A.M., CASTIELLO G., FEDI M., E FLORIO G., 2015. Integrated analysis of geological and geophysical data for the detection of underground man-made caves in an area in southern Italy. Journal of Cave and Karst Studies, v. 77, no. 1, p. 52–62. DOI:10.4311/2014ES0107
28	2015	FEDI M., FLORIO G. E PAOLETTI, V., 2015. MHODE: a local-homogeneity theory for improved source-parameter estimation of potential fields. Geophysical Journal International, 202, 887–900 doi:10.1093/gji/ggv185
29	2015	CELLA F., PAOLETTI V., FLORIO G., FEDI M., 2015. Characterizing elements of urban planning in Magna Graecia using geophysical

		techniques: The case of Tirenna (Southern Italy). Archaeological Prospection, 22, 207-219, doi: 10.1002/arp.1507.
30	2014	ABBAS M.A., FEDI, M. E FLORIO, G., 2014. Improving the local wavenumber method by automatic DEXP transformation. Journal of Applied Geophysics 111 (2014) 250–255. Doi: 10.1016/J.JAPPGEO.2014.10.004
31	2014	FLORIO G., FEDI M. E PASTEKA R., 2014. On the estimation of the structural index from low-pass filtered magnetic data. Geophysics, V. 79, NO. 6; P. J67-J80, doi: 10.1190/GEO2013-0421.1.
32	2014	IALONGO S., FEDI M. E FLORIO G., 2014. Invariant models in the inversion of gravity and magnetic fields and their derivatives. Journal of Applied Geophysics, V. 110, 51-62, doi: 10.1016/j.jappgeo.2014.07.023
33	2014	CASTALDO, R., FEDI, M. E FLORIO, G., 2014. Multiscale estimation of excess mass from gravity data. Geophysical Journal International, 197 (3), pp. 1387 - 1398. doi: 10.1093/gji/ggu082
34	2014	FLORIO G. E FEDI M., 2014. Multiridge Euler deconvolution. Geophysical Prospecting, V. 62, n. 2, 333-351, DOI: 10.1111/1365-2478.12078
35	2013	PAOLETTI V., IALONGO S., FLORIO G., FEDI M. E CELLA F., 2013. Self-constrained inversion of potential fields, Geophysical Journal International, V. 195, n. 2, doi: 10.1093/gji/ggt313
36	2013	FEDI M. E FLORIO G., 2013, Determination of the maximum-depth to potential field sources by a maximum structural index method. Journal of Applied Geophysics, Volume 88, Pages 154–160, doi: 10.1016/j.jappgeo.2012.10.009.
37	2012	FEDI M., FLORIO G. E CASCONI L., 2012. Multiscale analysis of potential fields by a ridge consistency criterion: The reconstruction of the Bishop basement, Geophysical Journal International, 188, 1, 103-114, doi: 10.1111/j.1365-246X.2011.05259.x
38	2012	GAUDIOSI, G., ALESSIO, G., CELLA, F., FEDI, M., FLORIO, G., NAPPI, R., 2012. Multiparametric data analysis for seismic source identification in the Campanian area: Merging of seismological, structural and gravimetric data. Bollettino di Geofisica Teorica ed Applicata 53 (3), 283-298
39	2011	FEDI M. E FLORIO G., 2011. Normalized downward continuation of potential fields within the quasi-harmonic region. Geophysical Prospecting, 59 (6), 1087-1100.
40	2011	FLORIO G., FEDI M. E CELLA F., 2011. Insights on the spreading of Tyrrhenian Sea from the magnetic anomaly pattern. Terra Nova, 23, 2, 127–133, doi: 10.1111/j.1365-3121.2011.00992.x
41	2010	CASTIELLO G., FLORIO G., GRIMALDI M. AND FEDI M., 2010. Enhanced methods for interpreting microgravity anomalies in urban areas. First Break, 28, 8, 93-98.
42	2009	CELLA F., FEDI M. E FLORIO G., 2009. Toward a full multiscale approach to interpret potential fields. Geophysical Prospecting, 57, 543-557.
43	2009	FEDI M., FLORIO G. E QUARTA T., 2009. Multiridge Analysis of Potential Fields: Geometrical Method and Reduced Euler Deconvolution. Geophysics, 74, n. 4, L53-L65
44	2009	FLORIO G., FEDI M. E RAPOLLA A., 2009. Interpretation of regional aeromagnetic data by the scaling function method: the case of Southern Apennines (Italy). Geophysical Prospecting, 57, 479-489.
45	2009	PAOLETTI V., DI MAIO R., CELLA F., FLORIO G., MOTSCHKA K., ROBERTI N., SECOMANDI M., SUPPER R., FEDI M. E RAPOLLA

		A., 2009. The Ischia volcanic island (Southern Italy): Inferences from potential field data interpretation. <i>Journal of Volcanology and Geothermal Research</i> , 179, 69–86.
46	2008	FEDI M., FLORIO G., GAROFALO B., LA MANNA M., PELLEGRINO C., ROSSI A. & SOLDVIERI M.G., 2008. Integrated geophysical survey to recognize Picentia's buried walls, in the archaeological park of Pontecanano-Faiano (southern Italy), <i>Annals of Geophysics</i> , 51, 5/6, 867-875.
47	2008	RAPOLLA A., CELLA F., FEDI M., FLORIO G. & PAOLETTI V., 2008. A Review of the Gravity and Magnetic Studies in the Tyrrhenian Basin and its Volcanic Districts. In 'Gravity, Magnetic, Electric and Electromagnetic methods in Seismology and Volcanology, Catania, Italy, Sept. 27-29, 2006' <i>Annals of Geophysics</i> , 51, 1, 1-24.
48	2007	PAOLETTI V., FEDI M., FLORIO G. & RAPOLLA A., 2007. Localized Cultural Denoising of High-Resolution Aeromagnetic Data, <i>Geophysical Prospecting</i> , 55, 421-432.
49	2007	CELLA F., FEDI M., FLORIO G. GRIMALDI M. & RAPOLLA A., 2007. Shallow structure of the Somma-Vesuvius volcano from 3D inversion of gravity data. <i>Journal of Volcanological and Geothermal Research</i> , Vol. 161, 4, 303-317
50	2006	FLORIO G., FEDI M. & PASTEKA R., 2006. On the Application of Euler Deconvolution to the Analytic Signal. <i>Geophysics</i> , 71, n. 6, L87-L93
51	2005	PAOLETTI V., SECOMANDI M., FEDI M., FLORIO G. AND RAPOLLA A., 2005. The integration of magnetic data in the Neapolitan volcanic district. <i>Geosphere</i> , V. 1, n. 2, p. 85–96
52	2005	FEDI M., CELLA F., FLORIO G. & RAPOLLA A., 2005. Multiscale derivative analysis of the gravity and magnetic fields of Southern Apennines (Italy). In: "CROP Project, Deep seismic exploration of the Central Mediterranean and Italy (Atlases in Geoscience, Volume 1)", I. Finetti, ed., Elsevier Science, 281-318
53	2005	PAOLETTI V., SUPPER R., CHIAPPINI M., FEDI M., FLORIO G. & RAPOLLA A., 2005. Aeromagnetic survey of the Somma-Vesuvius volcanic area. <i>Annals of Geophysics</i> , 48, 2, 199-213.
54	2005	FEDI M., FERRANTI L., FLORIO G., ITALIANO F. & GIORI I., 2005. Understanding the structural setting in the Southern Apennines (Italy): Insight from Gravity Gradient Tensor (GGT). <i>Tectonophysics</i> , 397, 21– 36.
55	2004	PAOLETTI V., FEDI M., FLORIO G., SUPPER R. & RAPOLLA A., 2004. The new integrated aeromagnetic map of the Phlegrean Fields volcano and surrounding areas. <i>Annals of Geophysics</i> , 47-5, 1569-1580.
56	2003	FEDI M. & FLORIO G., 2003. Decorrugation and removal of directional trends of magnetic fields by the wavelet transform: application to archeological areas. <i>Geophysical Prospecting</i> , 51, 261-272.
57	2002	RAPOLLA A., CELLA F., FEDI M. & FLORIO G., 2002. Improved techniques in data analysis and interpretation of potential fields: examples of application in volcanic and seismically active areas. <i>Annals of Geophysics</i> , 45, 6, 733-751
58	2002	FEDI M. & FLORIO G., 2002. A stable downward continuation by using ISVD method. <i>Geophysical Journal International</i> , V. 151, 146–156.

59	2002	BRUNO P.P., DE ALTERIIS G. & FLORIO G., 2002. The western undersea section of the Ischia volcanic complex (Italy, Tyrrhenian Sea) inferred by marine geophysical data. <i>Geophysical Research Letters</i> , V. 29, n. 9, 57-1/57-4.
60	2001	CARRARA E, CARROZZO M.T., FEDI M., FLORIO G., NEGRI S., PAOLETTI V., PAOLILLO G., QUARTA T., RAPOLLA A. & ROBERTI N., 2001. Resistivity and radar surveys at the archaeological site of Ercolano. <i>Journal of Environmental and Engineering Geophysics</i> , V. 6, n.3, 123 - 132.
61	2001	FEDI M. & FLORIO G., 2001. Detection of Potential fields source boundaries by Enhanced Horizontal Derivative method. <i>Geophysical Prospecting</i> , V. 49, n.1, 40 - 58.
62	1999	FLORIO G., FEDI M., CELLA F. & RAPOLLA A., 1999 The Campanian Plain and Phlegrean Fields: structural setting from potential field data. <i>Journal of Volcanological and Geothermal Research</i> , 91, 2-4, 361-379
63	1998	CELLA F., FEDI M., FLORIO G. & RAPOLLA A., 1998. Boundaries of magnetic anomaly sources in the Tyrrhenian Region. <i>Annali di Geofisica</i> , V 41, n 3, 433-447.
64	1998	FEDI M., FLORIO G. & RAPOLLA A., 1998. 2.5 D modelling of Somma-Vesuvius structure by aeromagnetic data. <i>J. Volc. Geotherm. Res.</i> , Vol. 82, n. 1-4, pp.: 239-247
65	1998	CELLA F., FEDI M., FLORIO G. & RAPOLLA A., 1998. Gravity modelling of the litho-asthenosphere system in the Central Mediterranean. <i>Tectonophysics</i> , Vol. 287, n. 1-4, 117-138.
66	1997	CAPUANO P., FLORIO G. & GASPARINI P., 1997. Structural model of the Northern Latium volcanic area constrained by MT, gravity and aeromagnetic data. <i>Annali di Geofisica</i> , v. XL, n.5, 1069-1081.
67	1996	FEDI M., FLORIO G. & RAPOLLA A., 1996. The pattern of crustal blocks rotations in the Italian region deduced from aeromagnetic anomalies. In: Morris A. e Tarling D. H., editors: "Palaeomagnetism and tectonics of the Mediterranean region", Geological Society, London, Special Publication, n. 105, 147-152.
68	1994	FLORIO G., FEDI M., RAPOLLA A., FOUNTAIN D.M. E SHIVE P.N., 1994. Reply to "Comments on Anisotropic magnetic susceptibility in the continental lower crust and its implications for the shape of magnetic anomalies". <i>Geophys. Res. Lett.</i> , 21, n.24, 2775-2776
69	1994	FEDI M., FLORIO G. & RAPOLLA A., 1994. Seamount Magnaghi: a gravimetric and magnetic combined study. <i>Boll. di Geof. Teor. Appl.</i> , v. 36, n.141-144, 523-531
70	1994	FEDI M., FLORIO G. & RAPOLLA A., 1994. A method to estimate the total magnetization direction from a distortion analysis of magnetic anomalies. <i>Geophysical Prospecting</i> , 42, 3, 261-274.
71	1993	FLORIO G., 1993. An interpretation of abnormal shape magnetic anomalies in South-Eastern Italy. <i>Boll. di Geof. Teor. Appl.</i> , 35, 140, 447-461
72	1993	FLORIO G., FEDI M., RAPOLLA A., FOUNTAIN D.M. E SHIVE P.N., 1993. Anisotropic magnetic susceptibility in the continental lower crust and its implications for the shape of magnetic anomalies. <i>Geophysical Research Letters</i> , 20, n. 23, 2623-2626
73	1990	FEDI M., FLORIO G. E RAPOLLA A., 1990. The role of remanent magnetization in the southern Italian crust from aeromagnetic anomalies. <i>Terra Nova</i> , 2, n. 6, 629-637. DOI: 10.1111/j.1365-3121.1990.tb00128.x

Titoli

- Responsabilità scientifica generale o di unità (work package, unità nazionale nei progetti europei o locale in quelli nazionali ecc.) per progetti di ricerca internazionali e nazionali ammessi al finanziamento sulla base di bandi competitivi che prevedano la revisione tra pari:
 - Progetto PRIN 2022 PNRR, *Multidisciplinary Investigations of the Seismogenic Structure of Casamicciola area (Ischia Island)* - MISS Casamicciola Principal Investigator (30/11/2023-2025)
 - Pompeii between the archaeological site and the modern town. Knowledge, restoration and enhancement of the Insula Occidentalis. (28-09-2017 al 27-09-2019)
- Direzione o partecipazione a comitati di direzione di riviste Scopus/WOS o classificate da ANVUR, nonché di collane editoriali, enciclopedie e trattati di riconosciuto prestigio nel settore:
 - Associate Editor: Geophysical Prospecting, ISSN:0016-8025, Blackwell Science Limited: PO Box 88, Oxford OX2 0NE United Kingdom, **dal 01-01-2005 al 31-12-2016**
 - Associate Editor: GEOPHYSICS, ISSN: 0016-8033, Society of Exploration Geophysicists: PO Box 702740: Tulsa (OK, USA), **dal 01-01-2015 a oggi**.
 - Deputy Editor: Geophysical Prospecting, ISSN: 0016-8025, Blackwell Science Limited:PO Box 88, Oxford OX2 0NE United Kingdom, **dal 01-01-2017 a oggi**
- Partecipazione al collegio dei docenti nell'ambito di dottorati di ricerca accreditati dal Ministero:
 - Membro del collegio dei docenti del dottorato di ricerca in "Analisi e Modellazione dei Sistemi Ambientali" (dal 2003 al 2009), Università degli Studi di Napoli "Federico II"
 - Membro del collegio dei docenti del dottorato di ricerca in "Scienze della Terra" (dal 2010 al 2012), Università degli Studi di Napoli "Federico II"
 - Membro del collegio dei docenti del dottorato di ricerca in "Scienze della Terra, dell'Ambiente e delle Risorse" (dal 2013 a tutt'oggi), Università degli Studi di Napoli "Federico II"
- significativi riconoscimenti per l'attività scientifica, incluse l'affiliazione ad accademie di riconosciuto prestigio nel settore e la presidenza di società scientifiche di riconosciuto prestigio:
 - Loránd Eötvös Award 2010 (<https://prod.eage.org/en/about-eage/awards/overview-awards/lorandeotvos-award>) , premio istituito dalla European Association of Geoscientists and Engineers per il miglior articolo pubblicato su Geophysical Prospecting nell'anno precedente (Cella F., Fedi M. e Florio G., 2009. Toward a full multiscale approach to interpret potential fields. Geophysical Prospecting, 57, 543-557)
- partecipazione come relatore a convegni di carattere scientifico nazionali o internazionali:
 - Più di 60 presentazioni a convegni internazionali (Society of Exploration Geophysics Annual Meeting, European Association of Geoscientists and Engineers Conference, European Geophysical Society General Assembly, Joint Assembly of AGU, SEG & NABS, European Meeting of Environmental and Engineering Geophysics, Near Surface Geoscience, Conference on Airborne, Drone and Robotic Geophysics, International Meeting for Applied Geoscience & Energy (IMAGE), ...)
 - Alcune decine di presentazioni a convegni a carattere nazionale (Gruppo di Geofisica della Terra Solida, Workshop Nazionale di Geoelettromagnetismo, Forum Italiano di Scienze della Terra, Congresso della Società Geologica Italiana, CRUST Workshops, ...)
- Altri titoli che contribuiscano a una migliore definizione del profilo scientifico:
 - Membro della Commissione per l'Abilitazione Scientifica Nazionale alle funzioni di professore universitario di prima e seconda fascia del Settore 04/A4 – GEOFISICA (2021-2023)
 - Relatore di 9 tesi di dottorato, di cui una internazionale

data

04/10/2024

firma

(F.to)