

Curriculum Vitae	
Informazioni personali	
Nome Cognome	
Qualifica	Tecnologo I Livello
Amministrazione	Agenzia Spaziale Italiana
Incarico attuale	Responsabile Unità Operativa “Satelliti Scientifici e per l’Esplorazione Robotica”
Numero Telefonico dell’ufficio	+39-0835377506
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E-mail istituzionale	raffaele.mugnuolo@asi.it
Titoli di studio e professionali ed esperienze lavorative	
Titolo di studio	Laurea in Scienze dell’Informazione
Altri titoli di studio e professionali	
Esperienze professionali (incarichi ricoperti)	<p>Dal 1/11/1987 assunto al Piano Spaziale Nazionale, poi diventata Agenzia Spaziale Italiana, occupandosi di attività di esplorazione planetaria sia per gli aspetti di robotica sia per gli aspetti scientifici, con pieno coinvolgimento nelle interazioni sia con i partner internazionale, sia con la comunità scientifica e industriale nazionale.</p> <p>Coinvolto con incarichi diversi in programmi di esplorazione planetaria (conclusi e in corso) quali: Rosetta, Venus Express, Dawn, ExoMars, Bepi Colombo, JUICE, Mars Sample Return, ArgoMoon/Artemis-1.</p> <p>Nel corso degli anni presso l’Agenzia Spaziale Italiana ha ricoperto tutti i ruoli nelle diverse fasi della gestione di programmi (DEC/Responsabile di Programma/Progetto, Commissioni di Collaudo, Commissioni di Congruità, Responsabile di Procedimento), a cui si aggiungono gli incarichi ricoperti nella struttura organizzativa dell’ASI seguenti.</p> <p>Incarichi attuali:</p> <ol style="list-style-type: none"> 1. Responsabile U.O. Satelliti Scientifici e per l’Esplorazione Robotica” – <i>ad interim</i> 2. Capo Ufficio Missioni Robotiche di Esplorazione - ” – <i>ad interim</i> <p>Incarichi passati</p> <ol style="list-style-type: none"> 3. Capo Ufficio Missioni Scientifiche dell’Unità Esplorazione e Osservazione dell’Universo 4. Responsabile Operativo del Broglio Space Center di Malindi (Kenya) 5. Responsabile di Unità Operativa Payload Robotica 6. Gruppo di coordinamento interno delle attività del Centro di Geodesia Spaziale di Matera 7. Responsabile Vicario del Centro di Geodesia Spaziale di Matera – 8. Responsabile di Tecnologie e Supporto Ingegneristico – Divisione Automazione e Robotica Esplorazione Luna e Marte

Autorizzo il trattamento dei miei dati personali ai sensi del Regolamento (UE) 2016/679 e del D. Lgs. 196/2003 come modificato ed integrato dal D. Lgs. 101/2018.

	<p>Incarichi di carattere Internazionale attuali</p> <p>9. ASI Point of Contact (POC) per la partecipazione alla missione Mars Ice Mapper in partnership con NASA, CSA e JAXA</p> <p>10. Advisor al PB-HME – Human Spaceflight, Microgravity and Exploration</p> <p>11. ExoMars ASI Payload Manager</p> <p>12. Rappresentante ASI al “ExoMars Rover Instruments Steering Committee (RISC)”</p> <p>13. Co-Chair di ExoMars Tracking Committee (ETC) su incarico del Direttore Generale ESA</p> <p>14. Rappresentante ASI al International Mars Exploration Working Group (IMEWG)</p> <p>Incarichi di carattere Internazionale ricoperti in passato</p> <p>15. Gruppo iMARS-2 per a definizione dell’architettura di missione Mars Sample Return</p> <p>16. Delegato al PB-HME - Human Spaceflight, Microgravity and Exploration</p> <p>17. Delegato al EUB/PB-HME - Exploration and Utilisation</p> <p>18. Punto di contatto ASI per il gruppo ESA “Analogue Activities for Human Exploration in Europe”</p> <p>19. Technical Observer Reviewer per la selezione delle missioni “classe M1 (Planets and Life) - M2 (Solar System)” del programma ESA “Cosmic Vision”</p> <p>20. Rappresentante ASI al “International Lunar Network (ILN)</p> <p>21. Rappresentante ASI al “International Lunar Exploration Working Group (ILEWG)</p> <p>22. Delegato Italiano al “AURORA Board of Participants” dell’ESA</p> <p>23. Deputy Project Manager del “ROSETTA Lander - PHILAE”</p> <p>24. Delegato ASI per “Automation & Robotics Users Center for International Space Station Utilization” -</p> <p>25. International Space Station – Multilateral Robotics Team</p> <p>26. Gruppo di lavoro ASI-CNES per la cooperazione nelle missioni</p>
Capacità linguistiche	<ul style="list-style-type: none"> • Inglese – liv. C (padronanza) • Francese – liv. A2 (elementare)
Capacità nell’uso delle tecnologie	Capacità avanzate
Altro (partecipazione a convegni e seminari, pubblicazioni, collaborazioni a riviste, ecc., ed ogni altra informazione che si ritiene di dover pubblicare	<p>Elenco Pubblicazioni</p> <p>1985</p> <p>1. A. Distante, R. Mugnuolo, E. Stella, "Functional description of a new image processing system", Proceedings of the Digital Equipment Computer User Society, pp.343-359, Cannes (F), 1985</p> <p>1988</p> <p>2. N. Ancona, L. Caponetti, A. Distante, R. Mugnuolo, "3D object recognition based on multiview representation and Extended Gaussian Image", Real-Time Object Measurement and Classification, Edited by Anil K. Jain (Springer-Verlag Berlin Heidelberg), NATO ASI Series, Vol.F42, p.227-249, 1988 https://doi.org/10.1007/978-3-642-83325-0_15</p> <p>3. A. Distante, R. Mugnuolo, E. Stella, G. Attolico, "Dense depth map reconstruction using special purpose hardware", SPIE - The International Society for Optical Engineering,</p>

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Cambridge Symposium on Expert Robots for Industrial Use, Vol.1008, pp.154-169, 1988 doi: <https://doi.org/10.1117/12.949136>

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4. A. Distante, R. Mugnuolo, E. Stella, G. Attolico, "Depth map using Depth-of-field and Stereo: an integrated approach", Proceedings of IEEE Int. Conference on Image Processing, Vol.2, pp.491-495, 1989

1990

5. M.T. Chiaradia, A. Distante, R. Mugnuolo, E. Stella, "Surface Recovering by local shading analysis", Progress in Image Analysis and Processing (IAPR'89), World Scientific Publishing Co. Pte. Ltd., pp.430-434, 1990
6. L. De Caro, S. Losito, R. Mugnuolo, G. Pasquariello, "An Approach To Information Fusion Of Tracking Algorithms For Space Applications", Proceedings of IEEE International Conference on Automation and Computer Vision (ICARCV'90), pp.1187-1191, McGraw-Hill Book Co, 1990

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7. Zhiling Wang, R. Mugnuolo, S. Losito, G. Pasquariello, "3-D Location and Attitude Evaluation for Rendez-Vous and Docking operation Using Single Camera", Proceedings of International Conference on Manufacturing Automation, pp.794-799, Hong Kong, 1992, <https://doi.org/10.1117/12.138491>
8. N. Ancona, L. Caponetti, A. Distante, R. Mugnuolo, "3D Object Recognition based on Viewpoint Analysis", Image and Vision Computing, ELSEVIER, Vol.10, No 8, pp.549-556, October 1992, [https://doi.org/10.1016/0262-8856\(92\)90075-E](https://doi.org/10.1016/0262-8856(92)90075-E)
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10. R. Mugnuolo, S. Di Pippo, et Al, "SPIDER Manipulation System: design and development", International Symposium on Artificial Intelligence, Robotics and Automation in Space (i-SAIRAS), pp.331-342, Cepadues-Editions, Toulouse (F), 1992
11. W. Zhiling, R. Mugnuolo et Al, "3-D location and attitude evaluation for Rendez-Vous & Docking operation using a single camera", SPIE-The International Society for Optical Engineering, Special Issue on "Manufacturing Automation", pp.255-266, vol.1713, 1992

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12. R. Mugnuolo, P. G. Magnani, et Al, "SPIDER Robotic Intelligent System: Design and Development", Proceedings of Third European In-Orbit Operations Technology Symposium (EIOOTS), pp.401-406, ESTEC, 1993
13. D.J. Moura, R. Mugnuolo, "The French and Italian Technical Activities in the field of Planetary Rovers", International coordination of the Exploration of Mars Workshop, Wiesbaden, 1993
14. C. Gerli, R. Mugnuolo, "Definition Study of a Rover for Planetary Exploration: the Italian Approach", International coordination of the Exploration of Mars Workshop, Wiesbaden, 1993

1994

15. S. Di Pippo, R. Mugnuolo, V. Del Re, "A Sensor Testing Lab for Space Robotics: a Distributed Approach to Future European A&R Programs", Third ESA workshop on Advanced Space Technologies for Robot Applications (ASTRA), ESTEC, 1994
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- 1995**
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21. R. Mugnuolo, S. Di Pippo, P. G. Magnani, E. Re, "The SPIDER Manipulation System (SMS)", International Symposium on Artificial Intelligence, Robotics and Automation in Space (i-SAIRAS-97), pp.255-260, Tokyo (JP), 1997
22. R. Mugnuolo, S. Di Pippo, P. G. Magnani, E. Re, "SPIDER - A Manipulation System for Payload Automation", Preparing for the Future, Special Issue of ESA Bulletin, Vol.7, no.2, 1997
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