



**SAPIENZA**  
UNIVERSITÀ DI ROMA



## REPORT ON THE WIRS YOUNG SCIENTIST (YS) EVENT

# “EMPOWERING WAVES: THE RADIANT ROLE OF WOMEN IN RADIO SCIENCE”

Date: February 16<sup>th</sup> 2024.

Location: Faculty of Engineering, Sapienza University of Rome, Rome, Italy.

Organizers: BIOEMLAB Young Scientists, Sapienza University of Rome - Micol Colella (PostDoc), Laura Caramazza (PostDoc), Simona D’Agostino (PostDoc), Sara Fontana (Ph.D. student), Noemi Dolciotti (Ph.D. student) and Carmen Pisano (Ph.D. student).

Workshop report editors: Micol Colella, Sara Fontana, Laura Caramazza, Simona D’Agostino, Noemi Dolciotti, Carmen Pisano.

## **1. Introduction**

On February 16<sup>th</sup> 2024, the first Young Scientist Event of the Women in RadioScience (WIRS) Italian Chapter, was organized by the PostDoc and PhDs members from the BIOEMLAB of Sapienza University of Rome: Micol Colella (PostDoc), Laura Caramazza (PostDoc), Simona D'Agostino (PostDoc), Sara Fontana (PhD student), Noemi Dolciotti (PhD student) and Carmen Pisano (PhD student).

The event, entitled “Empowering Waves: The Radiant Role of Women in Radioscience”, was held at Sapienza University Faculty of Engineering. The participation was open to all the URSI and URSI-WIRS members as well as to bachelor, master and PhD students. To facilitate the attendance the event was held in a hybrid modality.

This full-day meeting aimed to delve into the opportunities and significant roles of women in radio science. The program reflected such aim, by showcasing emerging women scientists sharing their inspiring experiences during the morning workshop “Empowered women: Roles of excellence in science and industry”, and by ensuring a possibility for the audience to engage in an open discussion on gender themes related to the field of research and industry, in the conclusive round table.

Among the many young women working in the field of radioscience, with inspiring and exceptional careers, five speakers were invited to give a speech at the morning workshop. The decision fell on:

- Dr. Anna Guerra, (IEIIT-CNR Bologna),
- Dr. Rosa Scapaticci (IREA-CNR, Napoli),
- Dr. Valentina Palazzi (University of Perugia),
- Dr. Maura Pilia (INAF-Osservatorio astronomico di Cagliari)
- Dr. Simona Salati (IGEA Medical SpA, Carpi)

A common element of the selected speakers was the role of relevance that they cover in their laboratory and affiliations, as well as in international scientific organizations. This was considered a prerogative element for the organizers, to show successful female figures in a scientific context often considered men's domain. However, diversification of the experiences was also considered fundamental, hence each speaker delved into one particular aspect of their career, giving an example of a possible path that could be undertaken by future generations, and providing insights on the challenges that were faced and how they were overcome. More details on the single talks are reported in a dedicated section.

## **2. Outline of the event and full description**

The full program can be found in Annex 1.

The event started with welcoming remarks from prominent representatives of Sapienza University, such as the Deputy Rector for Research Prof. Maria Sabrina Sarto, and the Director of the Department of Information Engineering, Electronics and Telecommunications, Prof. Massimo Panella.



*Figure 1. Welcome from prominent representatives of Sapienza University: the Deputy Rector for Research Prof. Maria Sabrina Sarto, and the Director of the Department of Information Engineering, Electronics and Telecommunications, Prof. Massimo Panella*

The welcome was followed by an introduction of the URSI Italian National committee, made by Prof. Giuliano Manara, who is the Scientific Secretary of the Italian URSI commission and Vice-President of URSI International. To conclude the welcoming and remarks, the chair of the WIRS Italian Chapter Prof. Micaela Liberti gave an update from the WIRS Italian Chapter, and introduced the YS event. Following the welcoming remarks and updates, the event continued with its two main sessions:

- A workshop dedicated to five emerging and successful women in the field of Radioscience;
- A roundtable to encourage discussion and exchange of opinion regarding gender themes.



*Figure 2. Prof. Micaela Liberti, chair of the WIRS Italian Chapter, opened the Young Scientists event.*

## **Workshop “Empowered women: Roles of excellence in science and industry”**

### ***1. Dr. Anna Guerra, IEIIT-CNR - “The ERC Challenge: Why It's Important to Get Involved - My Experience in European Funding Research”:***

The presentation focused on Dr. Guerra's experience as the recipient of the ERC 2023 Starting Grant, starting with brief mentions of her scientific background and career. The speaker emphasized pivotal stages in the project's preparation, writing, and submission, spotlighting factors that are crucial for securing the grant. The session wrapped up with an overview of the scientific activities related to her project CUE-GO: “Contextual Radio Cues for Enhancing Decision Making in Networks of Autonomous Agents”.

**2. Dr. Rosa Scapaticci, IREA-CNR - “A journey through biomedical engineering and electromagnetism, fueled by passion and a lot of determination”:**

During the presentation, the speaker shared her scientific background, highlighting her extensive professional journey, which included a blend of successes, pandemic-related interruptions, and significant personal life shifts. This path ultimately led her to win the PRIN 2022 project under 40 Mithemas - Microwave Theranostics enhanced by Magnetic Scaffolds in the follow-up of bone healing, which she briefly presented.

**3. Dr. Valentina Palazzi, University of Perugia - “Impact of international associations on the career in scientific research: my experience”:**

The speaker highlighted her experience as a member of the MTT-S, tracing back to the inception of her scientific career and detailing her involvement in international committees. Starting with the IMS PhD Sponsorship and MTT-S Graduate Fellowship, she progressed to roles such as membership in the IMS technical program, review committee, and chair of TC 26, ultimately assuming the position of MTT-S secretary.

**4. Dr. Maura Pilia, INAF-Cagliari Astronomy Observatory - “Young and Women in Astrophysics in Italy: Is It Possible?”:**

The speaker introduced the scientific context of neutron stars in which she operates, and discussed how the roles of leading women in astrophysics have inspired her career and influenced her choices. Additionally, the speaker mentioned her work with the Sardinian Radio Telescope and involvement in European projects, for which she was honored as “Donna di Scienza Giovani 2022”.

**5. Dr. Simona Salati, IGEA Medical S.p.a - “Bridging Worlds: A Scientist’s Journey from Academia to Industry”:**

Throughout the talk, the speaker detailed her career journey, which started in academia as a researcher for several years both in Italy and abroad. She emphasized the aspects that guided her transition into the industrial sector, where she currently serves as Research Coordinator for IGEA S.p.a, a leading company in biophysics therapies.

All presentations were recorded and made accessible to registered participants.

**Round Table “Empowering voices: Discussing the women’s contribution in Radio Science”**

*Panelists: Dr. Maura Pilia, Dr. Rosa Scapaticci, Dr. Valentina Palazzi.*

*Moderators: Dr. Francesca Benassi, Dr. Simona Di Meo, Dr. Michela Longhi*

At the registration to the YS event, attendees were offered the opportunity to submit questions they wished to be addressed during the round table discussion. Furthermore, in the registration form, they were asked the following question: “Do you think being a woman has impacted or will potentially impact the evolution of your career in the future?”.

This survey and the questions, collected from the registration phase, represented the starting point of the discussion during the round table. At the beginning of the session, the moderators showed the results of the survey, divided between the answers of students and non-students.

Among the non-students, about 85% of the answers were positive, meaning that the majority of attendees considered their career to be affected by being a woman. A similar percentage was found among the students, with a slightly higher percentage of negative answers (20% vs 15%, respectively).

The discussion started by commenting on these results. What emerged from the discussion is that while it is more frequent that the thought of a career affected by gender is more frequent after reaching a post-student stage, many female students encounter this aspect already at the early stages of their studies, due to a different perception of how they are treated with respect to their male colleagues.

Going through the different questions that were asked on the registration form, another key element that was raised in the discussion was how, especially in the industrial field, it is preferred to hire a person without any attachment. This is one of the typical barriers encountered by women.

What emerged from the discussion, is that there is still a problem of diversification, despite positive examples that demonstrate how mixed teams can work better. At the basis of a well constructed, diverse and inclusive group are education and equal opportunities. This also includes the opportunity to “not excel”, hence allowing the possibility for women to be "normal", and still have the same opportunities as men.

Moreover, the lack of representativeness of women in pivotal roles in the Radioscience field, as much as in many other fields, who could inspire young scientists, determines a weak point for balancing gender-based discrimination.

Finally, the discussion of the round table touched upon the existing incentives that guarantee positions or funding to women. Many diverging opinions were manifested on this topic, however, the common feeling was that, in our society, it is still important to foresee such kind of support to encourage women to apply for relevant positions or challenging grants.



Figure 3. Panelists and Moderators during the Round Table session “Empowering voices: Discussing the women’s contribution in Radio Science”.

### 3. Overview of the participants

A total of 92 attendees, 43 onsite and 49 online, participated in the event. The 56% were students (17% Ph.D. students and 39% bachelor’s and master’s), and the remaining 44% were researchers. This was a great achievement that highlighted the transgenerational importance of the topic.

As shown in Fig. 4, participants’ affiliations covered the entire national territory, including 16 Universities, 8 research centers and national institutions, and 1 industry.

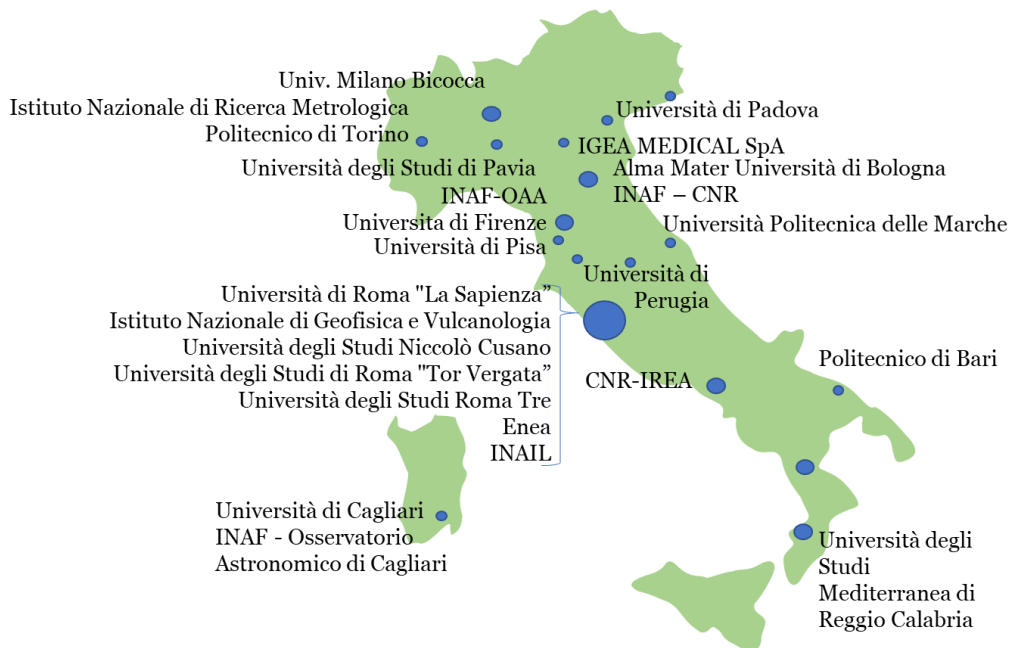


Figure 4 National distribution of attendees’ affiliations.

### 4. Conclusions and remarks



The YS WIRS event was the second event organized within the WIRS Italian Chapter, that followed the kick-off event held on February 21<sup>st</sup>, 2023.



The YS event, entitled “Empowering waves: the radiant role of women in radioscience”, was an important occasion to promote discussion of gender-related themes between young and senior researchers as well as students. The first session, “Empowered women: Roles of excellence in science and industry”, showcased five examples of prominent young women with inspiring roles in research, academia, and industry. The morning workshop aimed to provide inspiring stories and careers, especially to the youngest audience, who is about to face the working world. The Round Table was a moment to exchange opinions on the challenges and the problems that women have to face to build their careers. The main message that emerged is that there is still a huge effort that needs to be made within our society to ensure gender equality and equal opportunities, even in the field of the Radioscience. To reach this goal, it will be fundamental to focus on an education that will change the standard mind-set into an inclusive approach that sees an enrichment in gender diversity.

## **5. Acknowledgements**

We extend our gratitude to URSI International, Chapter Women in Radio Science, for sponsoring the event. Special thanks are also due to the Engineering Faculty of Sapienza University for their hospitality and the provision of rooms and infrastructure.

## ANNEX 1

### Final program



**WIRS YOUNG SCIENTIST EVENT**  
**“EMPOWERING WAVES: THE RADIANT ROLE OF WOMEN IN RADIO SCIENCE”**

**FEBRUARY 16th 2024**  
**FACULTY OF ENGINEERING, SAPIENZA UNIVERSITY**  
**VIA EUDOSSIANA, 18 - ROME**  
**Room 15, Cloister, RM031**

**Steering Committee:**  
Laura Caramazza, Micol Colella, Simona D'Agostino, Noemi Dolciotti, Sara Fontana, Carmen Pisano  
DIET, Sapienza University of Rome

### Programme

**Opening and welcome**

<b>10:45</b>	<b>Prof. Maria Sabrina Sarto</b> Sapienza University of Rome, Deputy Rector for Research	<b>Prof. Carlo Massimo Casciola</b> Sapienza University of Rome, Dean of the Engineering Faculty	<b>Prof. Massimo Panella</b> Sapienza University of Rome, Director of DIET
<b>11:00</b>	<b>Prof. Giuliano Manara</b> University of Pisa, Vice-President of URSI International and Scientific Secretary of the Italian URSI Commission		
<b>11:15</b>	<b>Prof. Micaela Liberti</b> Sapienza University of Rome, Chair of the <i>WIRS Italian Chapter</i>	<b>Prof. Alessandra Costanzo</b> University of Bologna, Co-Chair of the <i>WIRS Italian Chapter</i>	

**Workshop - Empowered women: Roles of Excellence in Science and Industry**

<b>11:25</b>	<b>“The ERC Challenge: Why It's Important to Get Involved - My Experience in European Funding Research”</b> <b>Dr. Anna Guerra</b> IEIIT-CNR Winner of ERC 2023 starting grant		
<b>11:50</b>	<b>“A journey through biomedical engineering and electromagnetism, fueled by passion and a lot of determination”</b> <b>Dr. Rosa Scapaticci</b> IREA-CNR Winner of PRIN2022 as PI under 40		
<b>12:15</b>	<b>“Impact of international associations on the career in scientific research: my experience”</b> <b>Dr. Valentina Palazzi</b> University of Perugia, IEEE MTT Administrative Officer: Secretary & URSI Commission D: Early Career Representative (ECR)		
<b>12:40</b>	<b>“Young and Women in Astrophysics in Italy: Is It Possible?”</b> <b>Dr. Maura Pilia</b> INAF-Cagliari Astronomy Observatory Awarded as <i>Donna di Scienza Giovani 2022</i>		
<b>13:05</b>	<b>“Bridging Worlds: A Scientist's Journey from Academia to Industry”</b> <b>Dr. Simona Salati</b> IGEIA Medical S.p.A. Research coordinator		
<b>13:30 - 14:30</b>	<b>Lunch Break</b>		
<b>14:30 - 16:30</b>	<b>Round Table - Empowering Voices: Discussing the Women's contribution in Radio Science</b>		
	Moderators: <b>Dr. Francesca Benassi</b> University of Bologna	<b>Dr. Simona Di Meo</b> University of Pavia	<b>Dr. Michela Longhi</b> University Niccolò Cusano
<b>16:30 - 16:45</b>	<b>Closing and remarks</b>		