

## WIA-E Rome Local Group

### Virtual Round Table about “Gender Equality in the Italian Aerospace field”

10<sup>th</sup> of May

Why this webinar? The WIA-E Rome Local Group (LG) is carrying on different projects and studies related to the Gender Equality situation in the STEM/Aerospace field at national and international level. To this purpose, a dedicated Gender Equality research team has been created. Since 2017, WIA-E Rome Local Groups is collaborating with University Space Engineering Consortium (UNISEC) Global to promote activities aiming at increasing the general awareness about gender equality in STEM and Aerospace fields. In particular, WIA-E Rome LG participated with a booth at the Fifth UNISEC-Global Meeting in December 2017 at Sapienza University of Rome (Italy) to enhance the collaboration among academic international entities and industries and promoting the university students' participation in international projects.

Among the different activities they have been working on, WIA-E Rome LG started a cooperation in May 2019 with the Japanese Woman in Aerospace Organization (Sorajo), thanks to the presence on site of our member (Alice Pellegrino). Furthermore, a dedicated “Gender Equality Panel” in Tokyo (Japan) was organized in December 2019.

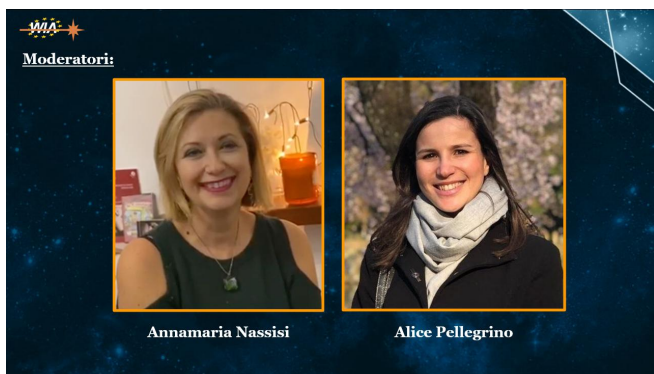
The participants from the audience interacted with different panellists representing the Japanese aerospace agency, industry and academia, by asking questions and proposing topics anonymously through a virtual platform. On the same theme, the WIA-E Rome LG organized a Virtual Round Table on the 10<sup>th</sup> of May at 3pm titled the “Gender Equality in the Italian Aerospace field” with a digital platform and the participation of experts representing the Italian aerospace field:

- Gabriella Arrigo, Director of International Relations of the Italian Space Agency (ASI)
- Cristina Valente, Director of the institutional and commercial unit in Telespazio
- Fabrizia Buongiorno, Technical Director at INGV and responsible for Satellite Observation activities
- Luca Rossetini, Amministratore Delegato di D-Orbit and President of “Associazione Delle Imprese Per Le Attività Spaziali” (AIPAS)
- Gordon Campbell, Science Applications and Future Technologies Department Director of Earth Observation Programmes di ESRIN - ESA
- Fabio Santoni, Associate Professor of Space Systems in the Department of Astronautical, Electrical and Energetical Engineering at la Sapienza University of Rome





The Virtual Round Table was moderated by the WIA-E Rome LG co-leader, Annamaria Nassisi, and a member of the Gender Equality research team, Alice Pellegrino (from Tokyo, Japan, where she lives).

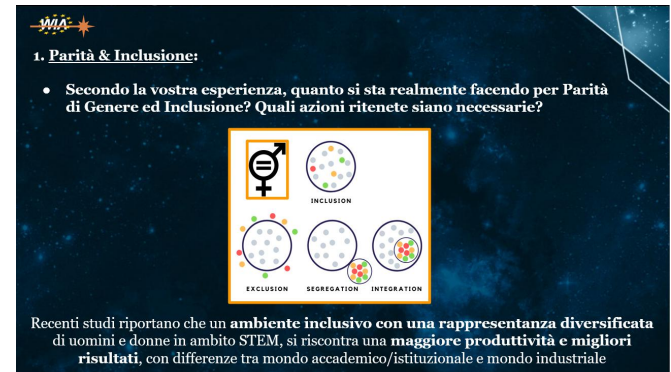


The event lasted for around 2 hours and half, with around 60 participants, without considering the moderators and invited guests.

At first, the WIA-E organization, purposes and main activities, the Rome LG projects were presented, and then all the main invited guests and the moderators were introduced. At the beginning of the Round Table, the main purposes of the Gender Equality Research Group were presented and the discussion started with the introduction of the four main themes and questions. All the invited guests had around three minutes each for expressing their opinions and to reply to the questions.

The first theme was about **“Equity and Inclusion”**. The related question was: “What actions do you think are necessary to promote Gender Equality

and Inclusion? According to your experience what is being done to support it?”



The experts all agreed that women are underrepresented in STEM (science, technology, engineering and mathematics) university courses and occupations. In the latest years, statistics proved that the percentage of female graduates is increasing at a faster rate if compared to the numbers of the female workforce in scientific and technical fields. Anyway, there is still a lot to do, especially for fighting the general unconscious bias about gender inequality and to increase the general awareness in both academic and professional environments.

According to some experts, more young female students should be encouraged to choose STEM subjects. Therefore, there is a need to understand and target the obstacles that keep female students away from STEM. To this purpose, a higher amount of dedicated gender-responsive educational programs for primary and secondary schools are needed, such as awareness-raising activities to improve gender equality and inclusion, to provide role models demonstrating that STEM and Aerospace fields can be for everyone. Both men and women are inclined to choose occupations traditionally dominated by members of their own gender and avoid those dominated by members of the opposite gender. There should not be barriers between what a woman must study rather than what a man should study. To fight these trends, the experts underlined that the example must come from the families (starting from the early ages of children’s life) and teachers of

elementary school kids. Indeed, the drivers behind gender gap can be attributed to traditional gender roles and stereotypes, representing not merely an education or government or industry problem, but a societal problem whose rationale is quite complex. Finally, inadequate legislation and lack of policies supporting girls to keep studying STEM subjects is still a serious issue.

When dealing with the Italian aerospace industry in both private and public sectors, some solutions have been proposed by the experts to benefit more women and men's rights and to decrease the women's deep "sense of precarity", especially when dealing with pregnancy. In particular, it is important to ease a woman in to balancing her work and her life (conciliation issue), without forcing her to choose between having a family or having a career. To do so, there must be a higher flexibility for working hours, smart working should be easily granted if needed, there must be a financial aid and support in case of maternity/paternity leave.

Another problem emerged in the discussion, regarding the equal possibilities of moving forward in a career in the aerospace field. Big aerospace programs usually last between 15 and 20 years. In this range period, a woman is more likely to be disadvantaged because of her choice to have a child. This could lead to an interruption or a slowdown of her career, where on the opposite side, a man is still completely devoted to his job, therefore he will have a better chance on getting a promotion.

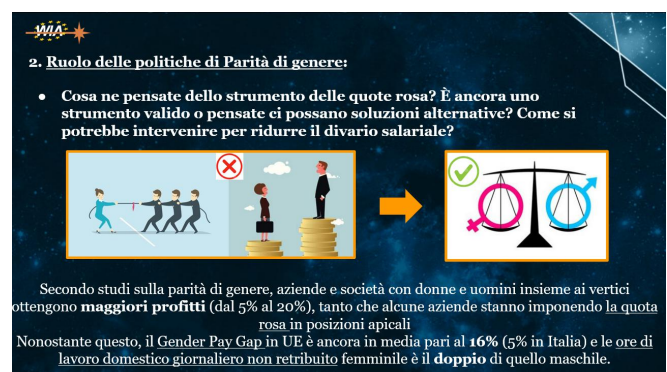
The experts also brought out a problem related to a cultural gap. If a woman has leading role, she is often seen in a negative perspective, as if she is "more aggressive", while this does not occur with male leading roles. Apart from educational and career-wise issues and related instruments to improve Gender Equality and Inclusion, the experts agreed on the fact that we must all pay attention to common and general approaches in our daily life behaviour. In Italy there is a strong

predominance of the male perspective; while a man is always addressed as an "Engineer" or "Doctor", a woman is addressed to "Ms" even in a professional environment.

To conclude, a higher level of equality and inclusion could be obtained by proposing and increasing initiatives able to sensitize small age students to these topics, at home and in schools. Parents should give their contribution from home, while teachers must defeat the bias in which a woman is not meant to work or study in STEM fields. To do so, hands-on activities, promotion of female role models working in the STEM fields, and equal treatment in classrooms should be promoted. Education and learning are a key instrument to make students more aware of the fact that their contribution can make the working or studying environment more equal and inclusive. While students are growing with a gender-free mentality, the "adult world" in professional environments must make its effort to be further flexible and open to the difficulties a woman can encounter in balancing her personal life and her career.

We must indeed recognize that more time and contribution is required before we can talk about gender equality and better inclusion.

The second theme focused on the "**role of politics for the Gender Equality**". The related question was: "What is your opinion on gender quotas? Do you believe they are a valuable tool or there might exist valid alternatives? What actions could we take to reduce the pay gap?"



**2. Ruolo delle politiche di Parità di genere:**

- Cosa ne pensate dello strumento delle quote rosa? È ancora uno strumento valido o pensate ci possano soluzioni alternative? Come si potrebbe intervenire per ridurre il divario salariale?

Secondo studi sulla parità di genere, aziende e società con donne e uomini insieme ai vertici ottengono **maggiori profitti** (dal 5% al 20%), tanto che alcune aziende stanno imponendo la **quota rosa** in posizioni apicali.

Nonostante questo, il Gender Pay Gap in UE è ancora in media pari al **16%** (5% in Italia) e le ore di lavoro domestico giornaliero non retribuito femminile è il **doppio** di quello maschile.



The experts all expressed a favourable opinion on gender quotas, although remarking that such measures should be adopted only as a temporary means to an end. They compared gender quotas to a shock, similar to the strict limitations imposed by governments during the COVID-19 emergency. Indeed, both can be seen as an inevitable measure necessary to force a change in the current scenario. However, they acknowledged bitterly that nowadays it is still not common to consider normal to have a woman in a top leading position.

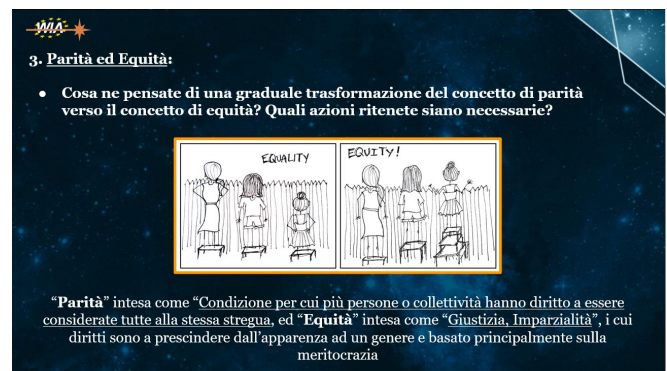
In this context, quotas turned out to be effective to overcome barriers and to correct gender imbalance in apical roles in different areas. Nevertheless, they have not produced a radical change of mentality so far. Indeed, quotas have failed to induce a real knock-on effect. Despite the increase of profits and productivity that female presence guarantees, women's diverse approach and business model still have to be trusted by most companies. In this sense, the speakers all agreed that smart working could lead to an impartial evaluation of the job performance, thus reducing biased perceptions of men and women.

The invited guests convened quotas were extremely useful to get women into selection committees. This was a key achievement to help selecting new candidates based on their merits and not on negative cultural prejudices. Sadly, women are hesitant to apply for top positions, as they fear they would not be selected even if subject to the same requirements. Here lies the issue of the pay gap: women earn less than men do on average due to the lack of female representation in managerial roles. In addition, it seems that women are not assertive enough when asking for an increase in salary. Indeed, especially due to cultural upbringing, they use to be extremely self-critic about their performance, thus ending in being often overtaken by male colleagues. The experts all recognized the urgency of a change in culture. Furthermore, they agreed it is crucial to undermine the misunderstanding of women's abilities and managerial skills. Indeed, if a woman is considered

able to manage and coordinate a family, why shouldn't she be suited to run a company?

In conclusion, one of the experts underlined that among the board of directors of the Italian Space Agency we can find just two women in a group of eight people. At an international level, only three space agencies out of forty-five are led by a woman (in Germany, Portugal and Australia). Finally, the experts made an appeal: all the women who succeeded in covering top managerial positions should contribute to promote female participation at apical levels. They encouraged the audience to believe that diversity is both a cultural and economic value.

The third theme was **"Equality versus Equity"**. The related question was: "What's your opinion about a gradual shift from the concept of equality to the concept of equity? What should be done to ease this transition?".



In detail, the concept of "equity" refers to a fairness and/or impartiality of treatment regardless of gender, in terms of rights and obligations, based on meritocracy. On the other hand, according to the idea of "equality", everybody has the right to be considered on the same level, independently on whether she/he was born male or female.

Nowadays, it is crucial to pursue a vision of "equity into diversity", i.e. to ensure the same access and advancement to all people, without disregarding their identities and flattening their peculiar traits. It is of utmost importance to support and respect diversities. In particular, the experts agreed we still have some way to go in

guaranteeing that the 3-G diversity (Gender, Geography and Generation) is fully represented and sustained. Indeed, different perspectives help generate better ideas to solve the complex problems of our evolving world. In this context, women contribute by bringing into play new ways of thinking, new knowledge and different experiences. Efforts have to be made to promote diversity and equity principles amongst our global space community. The invited guests argued we have to guarantee the equality of access first and then the equity of selection for all the candidates.

Concerning career opportunities, the experts all remarked a difficulty in identifying objective assessment criteria to evaluate productivity and performance. In addition, none could consider himself/herself to be completely unbiased, due to individual background and upbringing.

An interesting point of view was exposed by one of the speakers: one of the major breaking point a woman runs into during her career is maternity. The speaker stressed the importance for a company to define a proper re-integration plan. The expert made a comparison with a spacecraft project, marked by several tasks and related deadlines. If a company can delineate a mitigation plan for delays, why could not it manage to foresee possible maternities and re-organize the affected activities in the most efficient way? Furthermore, the speaker suggested that the creation of company nursery facilities could reduce the impact of maternity on a woman's career. To conclude, the industrial sector should support a more flexible work pattern, more suited to family needs, so that both women and men could benefit from it and organize their home life with greater freedom.

The last theme focused on the **“role of Education for Gender Equality”**. The related question was: “What do you think it could be done to encourage a cultural change towards a modern society with a due importance of complementary female and male “role models”? For example, what about of more education tools since primary school, more

support for work-life inclusion and balance, or new strategies for raising awareness to STEM disciplines?”



As already addressed, there is the need to start dealing with the cultural issue and its consequences on our society at the very beginning of the educational path, both at school and home. Very few schools and universities adopt a systematic approach or dedicated programs to increase the awareness on the gender gap and to provide “role models”. The Horizon 2020 “Promoting Gender Equality in Research and Innovation” funding is an example of an effective support to systematic initiatives aiming to promote gender equality. To keep up with the times, we need also to improve tutoring and scientific outreach meant for young people, making them aware of the STEM importance in our lives. In order to arise more interest in STEM, the Italian curricula should be re-organized, especially in terms of more activities and connections with industries working in STEM and Aerospace fields. At the same time, young men and women should learn more about the value of gender specificity and to respect male-female uniqueness and complementarity. This could be achieved through a more male teachers' presence in primary school as well as providing examples of how much women can be successful and what more could be achieved in the STEM fields with their contribution. Furthermore, social media or more informal channels (such as Netflix) could be also use to arise the general interest on these topics and provide examples and role models. This could

represent an effective strategy for helping young women in becoming more assertive and aware of their skills and potentialities since their childhood. Consequently, more women could acquire confidence and start being braver and determined in pursuing a career and looking for more jobs in STEM/Aerospace sectors. Everyone can be a promoter of this cultural changes. Indeed, the experts highlighted some situations where a simple detail like the use of a more inclusive language or the selection of not strongly gender-typed toys for a child could represent a very important element for the education of future generations.

One of the speakers highlighted the visible role model that a mother could represents within everyone's family. Traditionally, the mother runs the house and crucially contributes in providing very important examples and lessons to their children. Consequently, she represents a fundamental educational model for young men and women with her intrinsic qualities of supporting diversity. For once, it would be interesting to see the effects of the adoption of traditionally "feminine" qualities even for men in their professional environment. Indeed, this could bring to a managerial approach different to the actual "masculine" stereotypes of leadership seen as something very dominating, competitive and aggressive.

In the last part of the event, the audience had the chance of asking direct questions to the invited guests during a dedicated **"Questions & Answers" section**.

At first, the discussion started on how to overcome barriers and to increase everyone's inclusion in both working and social dynamics. The experts all agreed that inclusion can be seen as a direct consequence of diversification. For example, if parity access and equality would be ensured in the selection processes for hiring professionals in STEM/Aerospace fields, diversification is the key for the inclusion. Moreover, the introduction of rotating roles can be an efficient support to inclusion, especially in the in the public sector,

with the main aim to encourage to removal of gender barriers.

A different question outlined how the work-life balance is usually considered only a women's issue, looking for the reasons why this should be only a women's responsibility. The speakers all agreed that the social and cultural heritage is the main cause of the perception of family as a woman's duty. In order to counteract this vision, it is fundamental not only that both men and women have equal rights to take advantage of parental leaves but also that the social mindset is changed. For this reasons, inclusive role models are essential to promote an equal parental responsibility. Once again, this can be achieved through a more inclusive education from childhood.

Finally, the last question focused on why sometimes women are not aware and confident enough about their value and skills and how this can be seen as lack of courage and audacity, especially in a professional environment. Very often women have a lack confidence in their ability to compete in fields that men are stereotypically believed to perform more strongly in, such as STEM and Aerospace. Indeed, stereotypes have the power to determine people's beliefs about themselves and others. The experts all agreed that one of the motivations could be the different approach (of women & man) adopted to promote themselves. In the working environment, it would be better to celebrate the results and not the single people. Women can be discouraged to apply or accept apical positions in their working environment because they feel that they would require more effort for obtaining their male colleagues' respect and being accepted. In addition, women interested in pursuing a career in a male-dominated professional environment feel that they need to adopt a more "masculine" approach if they want to be successful in a leading position. Instead, it is important to promote a more "feminine" approach to improve relationship and team results.

To conclude, the WIA-E Rome LG main activities planned for the latest months of 2020 were presented, including all the changes done to the

schedule due to COVID-19 by converting in webinars the main planned events. Then, all the moderators and invited guests were recognised for the inspiring exchange of ideas and experiences with the promise to turn these common views into actions.

Finally, the members of the Gender Equality research team, part of WIA-E Rome LG, were acknowledged for the contribution, effort and support provided for the event's organization and promotion. WIA-E Rome LG has the pleasure to have very active members continuing to work together as ONE TEAM also when the physical allocation is very far from Rome!



Distant but yet so close to contribute and promote a future aerospace sector with an inclusive representation and a balanced workforce.

*Space makes you dream and we dream of a modern society with gender equality and inclusion*