The Outreach group has received financing from the University of Genova, DR 5247/2024, for the project called:

"Testimonial of inclusion to contrast gender violence in STEM schools"

Educate to prevent and combat gender-based violence

Numerous studies have shown that education has a profoundly positive impact on reducing gender-based violence, UNESCO (2020). For example, women with a secondary level education are significantly less likely to experience violence than their less-educated peers, World Bank (2021). Education has the power to save and improve the lives of women and girls, contributing to healthier families and stronger communities. It is essential that adolescents, especially girls, acquire the ability to assert their rights, developing self-confidence and autonomy, which are essential to take control of their bodies and their lives, UN Women (2019). Prevention plays a central role in efforts to eradicate and eliminate the root causes of gender-based violence. It is essential to strengthen self-esteem and autonomy, educating on gender equality and respect for differences. Only through knowledge can we become aware of prejudices and stereotypes, still deeply rooted in our society, European Institute for Gender Equality (2020).

The idea of the project:

The idea was born from a very positive experience in 2022, when the referent of this question coordinated a group of 11 PhD students from different parts of the world, participating in an MSCA-ITN network, with the aim of disseminating science at the Cassini High School in Genoa. The project consists of training a group of PhD students characterized by a diversity of gender, culture, religion and ethnicity, to promote scientific dissemination in STEM (Science, Technology, Engineering, Mathematics) high schools in Genoa. The PhD students will be trained by expert educators from the Science Museum in London (SML), who have over thirty years of experience in STEM disciplines and a particular focus on inclusion. This training is essential to ensure effective scientific dissemination, centered on students and their needs. The main goals of the project include: stimulating interest in technical disciplines and the opportunity to pursue higher education, demonstrating that anyone, regardless of gender, culture, religion and ethnicity, can excel in STEM subjects, and strengthening the self-esteem and autonomy of high school students.

Project activities:

School events with interactive activities from different STEM disciplines, led by PhD students, are planned. Each event will have a title that is representative of the department's activity (e.g. climate change, plastic pollution, extreme weather events, etc.). PhD students will present 4-5 interactive activities for each event, based on technical disciplines (chemistry, fluid mechanics, structures, geomatics, energy, materials). A typical event will be as follows: a short introduction of the topic, followed by 4-5 activities with rotating groups of 10 students. Each activity will last approximately 15 minutes, followed by a Q&A session. The total duration of the event will be approximately 2-2.5 hours. At the end of the event, participants will be invited to answer a questionnaire to evaluate the event, with a section dedicated to inclusion and changes in perception about the possibility of working in the STEM sector. The course managed by the SML will be divided into two phases: a day in presence in which the PhD students will learn the basics of scientific dissemination for a specific age group, with theory and group exercises. After a period of 1.5-2 months of preparation of the activities, an online lesson will be held to test and evaluate the activities, during which the PhD students will simulate their presentations as if they were real events. The SML group will provide constructive feedback to improve the activities.