



Contribution ID: 430

Type: **Parallel Talk**

GRaffa: a scientific communication project by young researchers for young people

Friday, 8 July 2022 09:45 (15 minutes)

GRaffa is a project designed and carried out by the Associazione Giovanile Le Scie Fische, funded by Lazio Region, with the aim of sharing the excitement of science and increasing appreciation for it, mainly through daily experiences of physical phenomena. It was conceived by young physics and philosophy researchers (mainly postdocs and PhD students) to spread physics and scientific culture by using a simple and fun language dedicated to the general public, especially school students. The main goal of the activities realized within the project is to allow people to understand that physics is not just the study of distant galaxies, particle accelerators or complex mathematical formulas. When we use the phone or ask ourselves when the moment is right to salt water to make pasta, we are already doing science!

Approaching science generates too often an “allergic reaction”. This cultural problem is also frequently encountered among young students who are in the learning phase and who are hostile to scientific proposals, as they are considered too complicated. We are strongly convinced that this prejudice towards the world of science makes a spontaneous approach more difficult. Scientific dissemination work is essential to tear down this wall, in particular inside schools. It is necessary to make children understand science is no more complicated than literature or history, but that it simply uses a different language: mathematics.

Several activities have been planned and realized with GRaffa so as to spread these messages as much as possible: a scientific column on social networks on everyday life science and curiosities; a youtube channel with pop and shorts video pills; discussions and hands-on laboratories in schools; popular talks; scientific laboratories for general public during popular events, such as the European Researchers Night.

In the talk, we will present the results achieved with GRaffa, showing the online and in situ performed activities. For primary and middle school students, we designed simple, yet interesting, experiments that were able to convey how science infiltrates our everyday life in an enjoyable manner. For high school students, we prepared presentations on the structure of university courses in physics, the various theoretical and experimental branches of this fascinating discipline, as well as different job prospects.

These activities were very successful, as many students showed interest and asked several questions. Since the main goal of our association is to intrigue very young people, bridging the gap between their insecurities and their actual capabilities is crucial. The objective of the workshops, seminars and experiments was therefore to break with this “allergic reaction” and bring students, from primary school to high school, closer to the study of scientific disciplines. What we found to be particularly relevant for the effectiveness of these activities is that they were designed and promoted by a group of young researchers. This is probably because the generation gap is rather narrow, and therefore allows the younger generation to feel close to the researchers and therefore to be able to enjoy their presentations.

In-person participation

Yes

Primary authors: Ms PATRIGNANELLI, Elena (Istituto Nazionale di Fisica Nucleare & AG Le Scie Fische); DIO-
CIAIUTI, Eleonora (Istituto Nazionale di Fisica Nucleare & AG Le Scie Fische); Dr MARGONI, Emilia (Università
di Pisa, Université de Genève & AG Le Scie Fische); Dr RUBINO, Laura (Istituto Nazionale di Fisica Nucleare
& AG Le Scie Fische); Mr PETRASSI, Matteo (Istituto Nazionale di Fisica Nucleare & AG Le Scie Fische); Dr

DONGHIA, Raffaella (Istituto Nazionale di Fisica Nucleare & AG Le Scie Fisiche); Dr MACIS, Salvatore (Università Sapienza & AG Le Scie Fisiche); Dr GIOVANNETTI, Matteo (Università degli Studi di Tor Vergata & AG Le Scie Fisiche)

Presenter: DIOCIAIUTI, Eleonora (Istituto Nazionale di Fisica Nucleare & AG Le Scie Fisiche)

Session Classification: Education and Outreach

Track Classification: Education and Outreach