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The “wow” and the “how”: the challenge of effectively communicating SKA - 15’

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Although the Square Kilometer Array is by now an “old acquaintance” for the big community of scientists and technologists involved, this huge project is not as well known to the public of non-experts. The work package for outreach in the Italian PRIN-INAF project FORECast (FORmation and Evolution of Cosmic STructures with Future Radio Surveys) aims at presenting it in all its strength, in a joint effort with other projects supported as PRIN-INAF.

Building upon our great professional expertise in communicating radio astronomy to students and public, we are designing pioneering outreach activities aiming at showing both the fascinating science and the groundbreaking technology involved in SKA. Indeed, we believe that the great challenge for SKA-related communication is telling about the scientific opportunities and expectations (the “wow”) while also communicating the peculiarities of studying the Universe through huge amounts of invisible radio data (the “how”). With this ambitious aim, within FORECaST we are designing activities for different targets, that we would like to present and discuss at the II National Workshop of SKA Science and Technology.

We have produced a set of educational activities for primary and middle schools, showing the specific observing techniques. High school students will on the other side experience observing with real radio telescopes and dealing with databases for data reduction and analysis. We have also designed an exhibit showing radio data converted into multisensorial stimuli, in order to i) show the need of conversion of invisible collected data into significant and understandable features and ii) create an effective mean of inclusion of a sensorial impaired public. Besides, we are working together with other national PRIN projects for designing a virtual reality experience based upon cutting edge technology, in order to bring SKA to people and let them effectively and emotionally get involved, though physically far away: the societal and human aspects of the story will play an important role into the narration.

All designed activities obviously include the presentation of the scientific goals of the FORECaST and other involved projects, in order to present their strategies for contributing to our understanding of the Universe.

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