## XI International Conference on New Frontiers in Physics



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# Multi-messenger studies with the Pierre Auger Observatory

Thursday 1 September 2022 15:50 (20 minutes)

The combination of experimental data from Observatories studying ultra-high energy cosmic rays, photons, neutrinos and gravitational waves, has provided in the last decade many insights on the most extreme phenomena in the Universe. This multi-messenger approach is shedding light on the physics beyond production and propagation of these messengers by exploring their intimate connection.

The Pierre Auger Observatory, the world's largest ultra-high energy cosmic ray observatory, has a high potential for multi-messenger studies thanks to its sensitivity to photons and neutrinos above 10<sup>17</sup> eV. Several activities in this context are being carried out at the Observatory. We report here the latest results and perspectives from diffuse and targeted searches along with those from follow-up analyses.

### Is this abstract from experiment?

Yes

### Name of experiment and experimental site

Pierre Auger Observatory, Malargue (Mendoza) Argentina

#### Is the speaker for that presentation defined?

Yes

### Details

V. Scherini, Dr., Università del Salento and INFN Lecce, Italy. https://web.le.infn.it/

#### Internet talk

Yes

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