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Author: Prof. Nariman Ismayilov Shamakhy Astrophysical Observatory, Azerbaijan, ismailovnshao@gmail.com

Dr. Sarah Antier
CNRS, France, sarah.antier@oca.eu
Mrs. Zumrud Vidadi
Shamakhy Astrophysical Observatory, Azerbaijan, zumrudvidadiqizi@gmail.com
Mrs. Shabnam Agayeva
Shamakhy Astrophysical Observatory, Azerbaijan, sebnem-agayeva-94@mail.ru

## COSMIC GOLD RUSH: AN INTERNATIONAL COLLABORATIVE AND ASTRONOMICAL EFFORT WITH GRANDMA

## Abstract

The first detections of gravitational-wave events has revealed a universe teeming with the violent mergers of compact objects, like neutron stars and black holes. In spring 2023, will start the fourth observing run of observations of gravitational events organized by the LIGO-Virgo-KAGRA collaboration that will bring an immense impact to astronomy and explosive events. To do so, the Observatory of la côte d'Azur in France, Shamakhy Observatory and its partners have share their observational efforts and astrophysical analysis and knowledge in an international consortium named GRANDMA. GRANDMA is a world-wide network of telescopes with the primary scientific goal of discovering and characterizing electromagnetic counterparts of gravitational waves. Here we present an overview of the performances of GRANDMA during the last campaign O3 observing run, specific targets observed within GRANDMA of GRB 221009A the most lightened GRB seen in the Universe and actual news of the current campaign. Maybe during the time of the conference, we would have detect a kilonova, optical counterpart of gravitational wave events, which can reveal how gold is produced.