## Poster abstract for Cosmic Rays and Neutrinos in the Multi-Messenger Era conference

## Title: ANTARES - Baikal GVD Alerts Analysis

**Author:** Sergio Alves Garre<sup>1</sup>, Federico Versari<sup>1</sup>, A.D. Avrorin<sup>2</sup>, Zh.-A. Dzhilkibaev<sup>2</sup>, M.D. Shelepov<sup>2</sup> and O.V. Suvorova<sup>2</sup>

<sup>1</sup> On behalf of the ANTARES Collaboration

• • •

## Abstract

ANTARES and Baikal-GVD are both Cherenkov neutrino telescopes located in the Northern Hemisphere. As a consequence, their fields of view overlap allowing for a combined study of the sky. Since December of 2018, Baikal followed up a total of 25 ANTARES alerts, and while no prompt coincidence was found, a cascade mode search showed some events falling within an angular distance of less than 5° for three of these alerts. The 4.5° angular resolution of Baikal-GVD allows for the possibility of these events to be spatially correlated, which makes them of extreme interest.

In this poster we present the final results on the analysis of these alerts after the addition of the latest ANTARES shower dataset to the analysis, and the optimization of the search method with a novel Machine Learning Algorithm for background rejection.

<sup>&</sup>lt;sup>2</sup> On behalf of the Baikal-GVD Collaboration