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ThreeML Plugin for Multi-messenger Astronomy with IceCube JOHN EVANS, KWOK LUNG FAN, MICHAEL LARSON, University of Maryland, College Park, ICECUBE COLLABORATION — Multi-messenger astronomy requires combining data from multiple instruments with different energy ranges and particle types, leading to difficulties which may be addressed by the Multi-Mission Maximum Likelihood (3ML) framework. We introduce a python package for an unbinned-likelihood analysis called "MLA" to be used with public IceCube data that was recently released. MLA is designed to act as a standalone tool and as a plugin for 3ML. Combining the 3ML framework with IceCube data can contribute to analyses in multi-messenger astronomy with neutrino data. Here, we show the usage and preliminary sensitivity comparisons using the MLA package and 3ML.

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