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Measurement of the signal polarization with the network of ground-based gravitational wave detectors¹ SERGEY KLIMENKO, University of Florida — Measurement of the gravitational wave (GW) polarization is important for characterization of the wave astrophysical source. In my talk I present a method for reconstruction of the GW signal polarization with networks of GW detectors. The GW polarization state can be visualized as a data pattern in the network plane defined by the antenna pattern vectors. The polarization parameters such as the inclination angle of the source can be extracted from this pattern. I discuss the astrophysical implications of the polarization measurements and the reconstruction capabilities of the existing and future GW detector networks.

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