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Squeezing in the post-O5 era and synergies with third generation detectors.

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Detectors of the post-O5 era, as Virgo_nEXT and third generation detectors, as Einstein Telescope aim to achieve squeezing levels of the order of 10 dB. This implies a drastic reduction in optical losses, down to a level of a few percent. In this presentation, we will describe the study to reach these squeezing levels in the context of the Virgo_nEXT concept study, and the possible synergies with third-generation detectors, which aim at the same goals. In particular, we will illustrate possible avenues to reduce input and output losses, phase noise losses, filter cavity losses and interferometer losses.

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