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## Irreducible gravitational wave emission from a cosmic defect network

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Independently of the order of the phase transition, topology of the defects, and nature, global or gauge, of the symmetry broken, defect networks emit gravitational waves (GWs). In this talk I will review how any scaling defect network emits an irreducible GW background, which has scale-invariant amplitude for  $f \gg f_{\rm eq}$ . I will show results of numerical experiments where we compute, using different techniques, the GW signal generated by the scalar dynamics of a global theory. I will also briefly discuss the ability of direct detection GW observatories to detect this background.

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