

Abstract for an Invited Paper
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Bose-condensed states in 2D trapped gases

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I will discuss finite-size effects in trapped finite-temperature two-dimensional Bose gases, which include the formation of either true or quasicondensates. It will also be shown how the finite-size effects influence the crossover to the BEC regime. The second half of the talk will be dedicated to dipolar Bose gases in quasi2D geometries. I will show how the excitation spectrum acquires the roton-maxon character and how one gets either collapsing or supersolid states when the roton minimum touches zero.