Abstract for an Invited Paper
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Numerical Evidence of Gapless Spin Liquids on Ladders[1]

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I will present numerical evidence of strong-coupling phases for quasi-one-dimensional systems as ladder descendants of candidate models for 2D Bose metal and spin liquid states which possess surfaces of gapless excitations. I will discuss the phase diagrams for two concrete models (square lattice boson and triangular lattice spin models with ring-exchange) based on controlled numerical approaches (DMRG and ED), where such strong-coupling phases are realized in a wide regime of parameters. A close comparison between numerical results and slave-particle descriptions will allow us to characterize these phases in detail and identify signatures reflecting the parent 2D states.

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