

# Finite-size scaling behaviour in fully-connected equal-coupling multimode photonic networks

*Thursday, 1 September 2022 12:00 (2 hours)*

The phase transition in fully-connected, multimode equal-coupling photonic networks is studied via numerical simulations and by using methods from statistical mechanics. Finite-size scaling is used to estimate critical points and exponents, yielding a phase diagram in a relevant parameter plane, and confirming mean-field behavior as for the planar XY model.

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