

Speaker: Alejandro Ramírez Yanez, University of Guadalajara, Mexico
Title: Anomalous localization of light in one-dimensional Lévy photonic lattices
Date: Tuesday, July 15th, 12:00 o'clock (noon) s.t.
Place: Seminar room 915

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Localization of waves has been extensively studied, primarily in homogeneous random media. Significantly less attention has been given to wave localization in inhomogeneous systems, where the standard picture of Anderson localization does not apply. We fabricate photonic lattices with inhomogeneous disorder, modeled by heavy-tailed alpha-stable distributions, and measure the output light intensity profiles. We demonstrate that the spatial localization of light is described by an asymmetric stretched exponential function with respect to the excitation site.