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**Disordered Phase Modes in Quasi-2D Superconductors**

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In the last few years an increasing experimental evidence has been accumulating that in low-dimensional superconductors the superconducting ground state develops an emergent inhomogeneity. This behaviour can be triggered by strong disorder, as it has been seen in conventional superconductors like NbN, InOx and TiN, but it can be also induced by quantum confinement at the nanoscale, as it happens in arrays made of Al nanograins or in the 2D electron gas at the interface of insulating LAO/STO oxides. A crucial question is the understanding how the longitudinal and transverse superconducting phase modes adapt to this fragmented background. In this talk I will review our theoretical progresses in the understanding of quantum and classical disordered phase fluctuations, in connection with the experimental findings.

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