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The role of quenched disorder in polymerized membranes

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I review recent studies aiming to understand the effects of quenched disorder on polymerized membranes. This concerns both the ordered - flat - phase of membranes that is relevant for graphene and graphene-like materials and the crumpled-to-flat transition that takes place in generic polymerized membranes. I show that perturbative together with nonperturbative approaches provide a unified view of the phenomena taking place in these systems and reveal some intriguing behaviours.

Presenter: MOUHANNA, Dominique **Session Classification:** Parallel B