## Joint Annual Meeting of the Swiss and Austrian Physical Society 2023



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## [112] A strong-coupling mechanism for the pseudogap from spin fluctuations

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The mechanism of the pseudogap observed in hole-doped cuprates remains one of the central puzzles in condensed matter physics. We analyze this phenomenon via a Feynman-diagrammatic inspection of the Hubbard model. Our approach captures the pivotal interplay between Mott localization and Fermi surface topology *beyond* weak-coupling spin fluctuations. Our analysis naturally explains puzzling features of the pseudogap observed in experiments, such as Fermi arcs being cut off at the antiferromagnetic zone boundary and the subordinate role of hot spots.

## **Theoretical Work**

Theory

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