

Seminář oddělení magnetik a supravodičů

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- ✓ Přednáškový sál u knihovny, budova A, 1. patro
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Parquet equations as impurity solver

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Abstract. We solve quantum impurity models by means of the perturbation expansion in interaction strength. We derive a simplified form of the so called parquet equations justified in the strong coupling regime and low temperatures. Resulting numerically manageable computational scheme is applied to both the single impurity Anderson model and the Hubbard model in the DMFT approximation. We obtain qualitatively correct results including sharp Kondo resonance exponentially scaling with U . Finally, we present the multi-orbital extension and solve the two-orbital model.
