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## Fermionic self energy near quantum criticality in two dimensions

*Tuesday 24 September 2024 14:30 (1h 40m)*

We study the functional renormalization group flows of fermionic self energy close to quantum criticality in two dimensional systems of fermions coupled to a collective order parameter mode. Taking into account the flow of the bosonic mass we analyze how the non-Fermi liquid state is generated upon reducing the cut-off scale close to the quantum criticality. Within our framework we capture the crossover to the standard Fermi liquid behaviour while detuning the system from the quantum critical point at temperature  $T=0$  and  $T>0$ .

**Presenter:** HOMENDA, Mateusz

**Session Classification:** Poster Session