Contribution ID: **24** Type: **Poster**

Polaron approach to quantum mixtures

Monday 2 September 2024 17:00 (2 hours)

The polaron, a particle dressed by excitations of a quantum medium, has been extensively studied in ultracold atomic gases. It represents the ultimate limit of imbalanced populations in quantum mixtures, and as such has relevance to the phase diagram of a wide range of systems, such as Fermi-Fermi, Bose-Bose, and Bose-Fermi gases. Here, I will present a variational approach to quantum mixtures which is inspired by highly successful variational approaches to the polaron problem.

References

Short bio (50 words) or link to website

https://research.monash.edu/en/persons/jesper-levinsen

Relevant publications (optional)

Career stage

Professor

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