



# Department of Physics

## Isfahan University of Technology

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Dear Admission Committee,

I am pleased to recommend Komeil Najafi, a master's student at Isfahan University of Technology, who has been conducting his thesis under my supervision. His research focuses on quantum sensing, specifically using magnonic systems to detect gravitational gradients, a topic that lies at the frontier of quantum technology. This challenging and innovative project has shown great promise, and Komeil is preparing the work for publication.

Komeil is highly interested in quantum sensing and technology, particularly in using spin systems and magnons for gravity gradiometry. He has also explored broader quantum topics such as quantum machine learning, optimization, and computing. His dedication to understanding these cutting-edge subjects is reflected in his participation in several international conferences and workshops. For example, he attended the Summer School on Quantum Chaos, Dissipation, and Information at Nordita, Stockholm, where he presented a poster on his research. He also delivered a talk at the International Conference of Physics Students (ICPS) on quantum gravity gradiometers. He participated in the Second Workshop on Quantum Technology organized by Sharif University of Technology.

Komeil not only possesses strong technical skills but also demonstrates an impressive ability to collaborate effectively with his peers. He regularly contributes to group meetings and research discussions, showing his interest in working in international and interdisciplinary environments through his involvement in diverse academic communities. Komeil's capability to handle challenging problems, whether theoretical or practical, ensures that he consistently makes substantial progress in his work.

I am confident that Komeil's passion for quantum technology, combined with his determination and international experience, will enable him to excel in your PhD program. He would be a valuable addition to any research team.

Please do not hesitate to contact me if you require any further information regarding Komeil's qualifications or his research.

Farhad Shahbazi