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### **Title of the lecture:**

Surface acoustic waves: Classical and quantum regimes

### **Format:**

TBA

### **Contents**

1. Surface acoustic wave physics
2. Generation and detection of SAWs in the classical limit
3. Examples of classical SAWs in technology & physics
4. Generation and detection of SAWs in the quantum limit
5. Outstanding challenges for SAWs in quantum information

### **References:**

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4. R. Manenti, et al., *Nature Communications* **8**, 975 (2017)
5. A. Noguchi, R. Yamazaki, Y. Tabuchi, Y. Nakamura *Phys. Rev. Lett.* **119**, 180505 (2017)
6. B. A. Moores, L. R. Sletten, J. J. Viennot, K. W. Lehnert, *Physical Review Letters* **120** (2018)
7. K. J. Satzinger, et al., *Nature* **563**, 661 (2018)
8. A. Bienfait et al., *Science* **364**, 368-371 (2019)
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