

# Programmable Quantum Materials

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**Abstract:** Novel quantum phases with controllable properties are essential for new electronic and photonic functionalities. *Quantum materials* offer particularly appealing opportunities for the implementation of on-demand quantum phases. In this talk I will overview recent efforts to discover, characterize and deploy quantum materials controllable by light, gating, and nano-mechanical manipulation, effectively programming their properties. I will focus on enticing opportunities to investigate novel quantum phenomena using nascent nano-optical methods developed in our group [1-3].

## References

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