

Color centers for quantum sensing and communication - challenges and opportunities

Tuesday, January 29, 2019 2:30 PM (25 minutes)

Color centers, such as the nitrogen-vacancy center center in diamond are being used in early quantum sensing applications (e. g. as magnetometers) and they are promising spin-photon qubits with ms-scale coherence times at room temperature. In my presentation I will discuss challenges and opportunities for the further development of NV- centers (e. g. formation efficiency and deterministic placement) and discuss ideas for the search for color centers with properties that can rival and exceed those of the widely used NV- centers.

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