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Coherent anti-Stokes Raman scattering with a single broadband pulse YUJIE SHEN, Texas A&M University, DMITRI VORONINE, ALEXEI SOKOLOV, Texas A&M University, Baylor University, MARLAN SCULLY, Texas A&M University, Princeton University, Baylor University — Here we demonstrate single-beam coherent anti-Stokes Raman scattering (CARS) with a spectral notch consisting of a narrow wire placed in a 4-f pulse shaper. This was previously done by using resonant photonic crystal slab. Our current setup can be used in both forward detection and epi-detection, and is promising in achieving low-wavenumber Raman shift ($< 200~{\rm cm}^{-1}$) measurements.

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