

Abstract Submitted
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Vibrational and Rotational Raman Stokes Generation in a High Finesse Cavity JONATHAN GREEN, DENIZ YAVUZ, University of Wisconsin-Madison — We demonstrate the generation of continuous wave Stokes beams for both rotational and vibrational transitions in Deuterium gas. We report the generation of more than 300mW of rotational Stokes output power in molecular Deuterium which, to our knowledge, is the largest output power generated in a high finesse cavity-based continuous Raman laser. These experiments are carried out at a gas pressure of 0.1 atm, which is about 2 orders of magnitude lower than the pressure used in previous experiments.

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