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Rapid Adiabatic Passage in a Rb gas with intense Frequency Chirped Laser Light BRIAN KAUFMAN, TANNER GROGAN, TRACY PALTOO, MATTHEW WRIGHT, Adelphi Univ — We will discuss our progress toward using intense frequency chirped laser light to control the excitation of atoms in a room-temperature gas cell. We illuminate ^{87}Rb atoms with a 1 GHz in 8 ns frequency chirped pulse of laser light covering the $5S_{1/2} F=1 \rightarrow 5P_{3/2}$ and explore the saturation behavior as intensity increases. We estimate that we are exciting over 90% of the atoms over 1 mm^2 .

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