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Title:	Doppler free spectroscopy of Rubidium and vapor cell interferometer
Authors:	S, Vidhya (/jspui/browse?type=author&value=S%2C+Vidhya)
Keywords:	Doppler free saturation Hyperfine splitting Producing hyperfine spectrum Atomic structure
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Abstract:	Doppler-free saturation spectroscopy is a technique used for the precise determination of Hyperfine spectrum of atoms without Doppler broadening. Throughout this work measured the Doppler-free hyperfine spectrum of two isotopes(85 Rb and 87 Rb) of Rubidium atom and observed the power broadening of spectra. Then we incorporated a Mach-Zehnder interferometer in this spectroscopy setup to measure the pump light induced phase shift in the Rubidium vapor cell.
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