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## Collinear Laser Spectroscopy and Fluorescence Detection

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Collinear laser spectroscopy provides access to many nuclear properties such as isotopic shifts of the nuclear mean square charge radii, spins, nuclear magnetic moments and electric quadrupole moments. As measurements are carried out on a small time scale, this method is well suited for the investigation of isotopes far from stability.

The development of many different techniques used in collinear laser spectroscopy has led to very small line widths of measured resonances (several 10MHz [1]). As these developments are always on going, additionally to the basic method new ideas for the fluorescence detection region of collinear laser spectroscopy apparatuses are presented and discussed.

[1] R Neugart et al 2017 J. Phys. G: Nucl. Part. Phys. 44 064002

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