

## AN OVERVIEW OF MACHINE LEARNING IN ROTATIONAL SPECTROSCOPY

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Over the last several years, particularly with the advent of well-documented open source libraries, it has become increasingly easier to apply machine learning techniques to a wide range of problems. Spectroscopy has not been immune to this, and literature searches for “machine learning” and “spectroscopy” return thousands of hits. However, these techniques have not yet found widespread use in the area of high-resolution rotational spectroscopy. In this talk, I will give an overview of the current work in the field and highlight some of the challenges that make this a difficult problem. Along the way, I hope to also provide a kind of “baseline”, showing what can be done without the use of machine learning techniques and where they may be particularly applicable.