Comparison of Period Finding Techniques to Identify RR Lyrae Stars

RR Lyrae (RRL) stars are well known standard candles that can be used to map out the structure of the Milky Way galaxy. In order to use these stars, however, one needs to be able to identify them effectively. One major issue in doing this is determining the pulsational period of an RRL star. In this poster, we will analyze different period finding techniques on RRL from the Kilodegree Extremely Little Telescope (KELT). In particular, we will focus on trying to separate RRL stars from binary stars, which can be easily mistaken for RRL stars if the wrong period is found.