

**Título/Title:**

Search for transiting planets in K2 light curves

**Orientador/Supervisor:**

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**Descrição/Description:**

The K2 satellite is delivering many interesting candidates around bright stars that are amiable for further characterization.

The project is to develop a transit search tool to search for candidates transiting planets in K2 light curves, specifically multiples. The tool should also include search for additional planets in the system. Multi-planetary systems are very valuable for formation studies and have a low false positive rate.

The project can also include screening and prioritization of exoplanet candidates.

We have a pipeline for the K2 space mission to derive light curves and produce transit candidates.

The goal of the project is to optimize/improve parts of this pipeline.

The candidates will be followed up by a large collaboration in order to confirm the planetary nature and derive the planetary mass.

This tool will be useful for other transits surveys like TESS and PLATO.

**Requisitos/Requirements:**

The project is based on heavy programming in python. Therefore, the candidate should be able and willing to program in python.