

Scope of Work

Minnesota State University Moorhead / Matt Craig

Astropy Moore Funding 2022-2023

The team at Minnesota State University Moorhead, under the leadership of Prof. Matt Craig, will build on the stellarphot¹ package to develop a general-purpose tool for performing stellar photometry using Astropy. This work will include:

Work Package 1: Code and User Guide Development

In collaboration with two other developers, to be appointed by him, Matt Craig will:

- Restructure the stellarphot package to have a simpler and better documented & tested API;
- Write a guide to performing photometry using the updated stellarphot package.

The deliverable from this work package will consist of the updated stellarphot codebase and accompanying documentation, ready to be used by Prof. Craig for teaching in Fall 2023.

Work Package 2: Student Testing & Addressing Emergent Issues

During Fall 2023 the stellarphot package will be used for teaching an observational astronomy course at Minnesota State University Moorhead. This course will act as a commissioning period for the tool, and we anticipate that the students will discover bugs and unclear documentation.

This work package provides funds to hire students to work under the supervision of Prof. Craig to address these emergent issues.

Work Package 3: Fall 2023 Continued Development

This work package will provide a teaching buy-out for Prof. Craig during Fall 2023 to enable him to spend more time on continued maintenance and testing of the stellarphot package at the level of 6 hours per week.

¹ <https://github.com/feder-observatory/stellarphot>