My name is Adrian Ariton, I am a first year student at Politehnica University of Bucharest and I am interested in the following Matplotlib project: Bivariate Color Maps.

About myself

My main passions are maths and data-structures, and I am a curious person that enjoys learning from anything. On the technical side, I am quite experienced in mathematical concepts such as linear algebra and complex analysis, as well as numerical and symbolic programming.

I have also won awards in both fields in olympiads and contests, such as: 1st place nationally at Romanian National Olympiad, Winner of Swift Student Challenge 2022, SEEMOUS Silver Medal and a few Hackaton prizes which can be found on my LinkedIn[1].

On my GitHub page one can find projects such as:

- Hephaestus++ : a c++ math library with 100digit calculation precision and tensor and Einstein notation implementations as well as basic simbolic math [https://github.com/adrianariton/hephaestus]
- QAMG : a collaborative project with 3 other colleagues that implements basic Quantum Arithmetic Gates and Single Z and X-cubit Surface Codes, using both the Quantum Fourier transform as well as classical bit logic [https://github.com/adrianariton/qamg]

Project Plan

My plan goes as follows:
- Implement Circular color maps [phase/amplitude], both discrete and continuous
- Square Color maps [real/imaginary part]
  - Diverging and Sequential Color Legends and Maps (parametrised)
  - Maps as non-periodical complex functions
  - Templates
  - Maps with non-euclidean norms
- Block Sphere Color Maps - could use in quantum vector plotting
- Surface Lines option for continuous colormap plots

I will be able to finish this project, because I have experience in complex analysis and I will dedicate this summer to implementing the requested features. Firstly I will implement this as a separate library (as the main page of the ideea suggests) and then I shall implement

Contact Information

Email: adrian.ariton0@gmail.com
Phone: +40742854676
GitHub: https://github.com/adrianariton
[1] **LinkedIn**: https://www.linkedin.com/in/adrian-ariton-386b33257

My Curriculum Vitae and this document can be found at
https://github.com/adrianariton/adrianariton.git