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[91 B] A hands-on test module in schools on astrophysics and computer science

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Based on simulated data from the SST-1M observation system, a former prototype for an international gamma-ray telescope experiment (CTAO) involving the University of Geneva, we've created a Python data analysis project suitable for high school students. This project is part of an interdisciplinary learning approach that combines physics and computer science and is intended to be completed over the course of one week. By using their prior knowledge in computer science and physics, this novel pedagogical sequence aims at immersing students in the world of scientific research, focusing on an authentic and meaningful topic.

This presentation covers the project, focusing on programming from the students' viewpoint and making a complex physicist-designed environment more accessible. It also reviews educational choices and their didactic reasoning. We've tested this project with 47 third year students from the College Rousseau in Geneva, analysing the outcomes and feedback gathered on Moodle. Based on these findings, we also outline potential improvements.

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