

MATHEUS HOSTERT

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Interested in research, data science, and software development. Strong background in Python and C++ programming languages. Demonstrated creative problem-solving, leadership skills, and a great communicator. I am at my best when tackling new challenges, working as part of a team, and learning new skills.

Technical Skills

Programming skills — Has developed several small and medium-sized projects in Python and C++ programming languages, including open-source tools for Particle Physics applications. Extensive knowledge of object-oriented programming. Made a few contributions to large-scale open-source projects in the field.

Data Analysis — Expert in data analysis with Numpy and Pandas libraries, with some experience with TensorFlow and PyTorch. Also an expert in Microsoft Excel and Mathematica.

Visualization — Advanced data visualization skills. Expert in Python's Matplotlib and Dash for graphs and dashboards.

Git — Extensive experience with collaborative Git projects using GitHub and GitLab, including software packaging and deployment.

Unix — Extensive experience with Bash on Linux and Darwin Unix operating systems.

Core Competencies

Leadership — Led dozens of research projects, and chaired two international and four national conferences. Mentored over six graduate students, working in teams of five to ten people.

Problem-solving — As demonstrated through multiple academic achievements in theoretical physics and successful career progression therein.

Communication — Over 50 talks at international conferences and institutions. Has also engaged with high-school students, teachers, and the general public in outreach events.

Writing — Extensive experience writing scientific and technical articles. Proficiency in Latex and Microsoft Word. Published over 20 peer-reviewed articles in internationally-renowned journals.

Languages — Fluent in English and Portuguese, and basic knowledge of Spanish.

Positions

Post-Doctoral Researcher — Perimeter Institute Oct 2019 — Present

Joint appointment with the University of Minnesota.

Developing computer simulations of complex physical systems, analyzing experimental data with statistical methods, leading graduate and master-level students, and presenting results at international conferences. Experience with working under time pressure and meeting deadlines.

Education

Receipt of excellence-based scholarship for partial undergraduate and full Ph.D. in Durham.

Ph.D. in Theoretical Physics – Durham University, United Kingdom Oct 2015 — Sep 2019

B.S. in Physics – Federal University of Santa Catarina, Brazil Mar 2011 — Jun 2015