Alessandro **Santini**

PhD candidate in Gravitational Physics

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Education

Ph.D. in Physics — *Potsdam, Germany*

Max Planck Institute for Gravitational Physics — *2023–present*

- **Supervisor:** Dr. Jonathan Gair

Master's Degree in Astrophysics and Space Physics — *Milan (MI), Italy*

Università degli studi di Milano-Bicocca — *2021–2023*

- **final degree grade:** 110/110 with distinction (cum laude)
- **Thesis:** Black-hole mergers in disk-like environments could explain the observed $q - \chi_{\rm eff}$ correlation
- **Thesis advisors:** Prof. Davide Gerosa, Dr. Roberto Cotesta

Bachelor's Degree in Physics — *Milan (MI), Italy*

Università degli studi di Milano-Bicocca — *2018–2021*

- **final degree grade:** 110/110 with distinction (cum laude)
- **Thesis:** Resolution of the Euler equations using the Athena++ code
- **Thesis advisor:** Prof. Bruno Giacomazzo

High School Diploma — *Lissone (MB), Italy*

Liceo Scientifico Statale Federigo Enriques — *2013–2018*

- **Final degree grade:** 97/100

Internships

Erasmus+ Scholarship — *Baltimore (MD), USA*

Johns Hopkins University — *Apr.–Jul. 2023*

Skills

Programming Python (proficient) – Bash – Mathematica, C, C++ (basic)

Other tools Latex (proficient), Git, Microsoft Office suite

Languages Italian (Native), English (Fluent)

Publication record

1. **Santini, A**; Gerosa, D.; Cotesta, R.; Berti, E.
   "Black-hole mergers in disklike environments could explain the observed $q - \chi_{\rm eff}$ correlation", Phys. Rev. D 108, 083033

Talks, conferences & workshops

Contributed Talks

APS April Meeting — *Minneapolis (MN), USA*

Migration traps in AGN disks and hierarchical mergers as promising origin of the observed $q - \chi_{\rm eff}$ correlation — *Apr. 2023*

Amaldi15 — *Online*

Black-hole mergers in disk-like environments could explain the observed $q - \chi_{\rm eff}$ correlation — *July 2023*

Conferences/workshops attended

Machine Learning in GW search: g2net next challenges — *EGO, Cascina (PI), IT*
28–31 Sep. 2022

ICERM - Numerical Relativity Summer School — *Online*
08–12 Aug. 2022

Gravitational Wave Open Data Workshop — *Online*
23–25 May 2022

Grants & Awards

2023 **DAP Travel Grant**, amount: $ 600