

Joonas Nättilä

joonas.nattila@su.se

Sex: Male
Born: June 25th, 1989, Tornio, Finland
Nationality: Finnish citizen
Languages: Finnish (native), English, Swedish

Nordita
Roslagstullsbacken 17
SE-10691, Sweden
Tel: +358 453577992
<http://natj.github.io>

Research interests

High-energy astrophysics: accretion (accretion disks); compact objects (neutron stars, black holes)

Nuclear physics: equation of state of cold ultra-dense matter

General relativity: ray tracing

Statistics: Bayesian inference; Monte Carlo methods

Employment

2018 –2019 | **Nordita Fellow**, Nordita, Stockholm, Sweden.

Education

2014–2017 | **Ph.D. in Astrophysics (with honours)**, University of Turku, Finland.
Supervisor: Prof. Juri Poutanen, Director of Tuorla Observatory.
Title: X-ray bursts as a tool to constrain the equation of state of the ultra-dense matter inside neutron stars

2012–2013 | **M.Sc. in Astronomy**, University of Oulu, Finland.

2008–2012 | **B.Sc. in Physics**, University of Oulu, Finland.

Awards & Recognitions

2018 | Turku Finnish University Society Prize for best doctoral dissertation

2018 | Väisälä Prize 2018: Prize for outstanding thesis in Astronomy

2018 | PCS Best Doctoral Thesis of 2017 Prize

2016 | Nordita Visiting Ph.D. Fellow

Presentations & Talks (selected)

2018 | **Astroplasmas: Particle acceleration and transport**, Rende, Italy.

2018 | **Invited: Time for Accretion**, Sigtuna, Sweden.

2018 | **Astroplasmas seminar**, Princeton, USA.

2018 | **Invited: Fire and Ice: Hot QCD meets cold and dense matter**, Saariselkä, Finland.

2017 | **Invited: Holographic dense QCD and neutron stars**, ENS, Paris, France.

2016 | **Invited: From quarks to gravitational waves**, CERN.

2016 | **Invited: JINA-CEE Symposium: Neutron Stars in the Multi-Messenger Era**, Ohio, USA.

In total 7 invited, 19 contributed.

Professional Societies and Services

2018– | IAU Junior member

2016– | eXTP Dense Matter science working group

2015– | ESA XIPE satellite Science Team (SWG2.2 Accreting Millisecond Pulsars)

2013– | Member of JuliaLang organization (Open source community for Julia programming language)

2012– | Member of Finnish Astronomical Society

In addition, referee for Monthly Notices of the Royal Astronomical Society and Astronomy & Astrophysics since 2016.

Public outreach

My research has been presented in various local (Finnish) media: [tiedetuubi.fi](#) (30.11.2016), [Turun Sanomat](#) (10.11.2017), [Turkulainen](#) (10.11.2017), [Tähdet & Avaruus](#) (25.11.2017), [Aamuset](#) (8.12.2017), [Tekniikka & Talous](#) (8.12.2017), [Verkkouutiset](#) (8.12.2017); And in international media: [Cosmos](#) 27.11.2017.