Rasmus Steen Kofoed Nielsen

Niels Bohr Institute Blegdamsvej 15-21 Copenhagen, 2200 Denmark

Phone: +45 24664501

email: rasmusskn@gmail.com



Born: June 10, 1996-Roskilde, Denmark

Nationality: Danish

Current occupation

In search of employment

Education

2018

2020

B.Sc. in Physics: Quantum Physics, University of Copenhagen

M.Sc. in Physics: High Energy Theory and Cosmology, University of Copenhagen

Areas of primary interest

- Quantum Field Theory
- General Relativity
- Differential Geometry
- Quantum Gravity
- String Theory

Subjects of prior and current work

- Black hole solutions in (2+1) dimensional Einstein gravity (*B.Sc. thesis*)
- Point particle solutions in (2+1) dimensional Anti-de Sitter space (*project o.c.s.*)
- Defect conformal field theory in the context of AdS/CFT (*M.Sc. thesis*)

Subject of master thesis

2019, 2020

Computation of various two-point functions between types of local single-trace scalar operators in different (less supersymmetric) defect versions of $\mathcal{N}=4$ super Yang Mills theory. Both conventional perturbative techniques, as well as techniques related to integrability in $\mathcal{N}=4$, are employed in order to obtain the next to leading order contributions of the two-point functions in question.

Subject of bachelor thesis

2018

Features of *black hole solutions in* (2+1) dimensional Einstein gravity with a cosmological constant. We examine both classical features like *mass and spin*, and the semiclassical appearance of a temperature leading to *Hawking radiation*.

Projects outside course scope

2018

Reading course on *point particle solutions* in (2+1) dimensional *Anti-de Sitter space*, and their connection to *rotating and non-rotating black hole solutions*.

Programming experience

• Extensive programming experience with:

Mathematica, Maple, MATLAB, Python, PHP and HTML

• Moderate programming experience with:

JavaScript, C++, C and Java

- Solved 24 Project Euler problems (programming challenges).
- Link to my GitHub Page, containing various projects.

Volunteer work

2017, 2018, 2019 Worked for the IT department of the nonprofit organization **Roskilde Festivalen**, by delivering and connecting cash registers to shops on the festival grounds.

Prior work experience

2008, 2009

Worked as paperboy for a local newspaper in the *Roskilde* area: **Dagbladet Roskilde**.

Language proficiency

• Danish: native speaker

• English: fluent

German: basic knowlegde Japanese: basic knowlegde

Hobbies

- Reading books and watching lectures on math and physics
- Doing exercise and weightlifting
- Playing computer games
- Watching films and TV series