# Filip Požar

filip.pozar@irb.hr +385-91-7993-180 14th September 1998

## EDUCATION

Mathematical gymnasium diploma, XV Gimnazija - MIOC — Zagreb
- GPA 4.8 — 2013-2017

University of Zagreb, Faculty of Science: Physics department — Zagreb
- Master of Science in Physics: GPA 4.72/5.00, ECTS 357/300 — Sep. 2017 - Oct. 2022

University of Zagreb, Faculty of Science: Physics department — Zagreb
- PhD Student enrolled in the Elementary Particle Physics program — Sep. 2023 -

## WORK

Institute Ruđer Bošković — Zagreb
- Assistant at the Division of Theoretical Physics, working for the Quantum Gravity and Mathematical Physics Group — Apr. 2023 -

## CONFERENCES, WORKSHOPS AND SCHOOLS

Workshop: Quantum Aspects of Spacetime and Gravity — Zagreb
Institute Ruđer Bošković — September 5-9 2022
- I have attended the workshop at the Institute Ruđer Bošković in Zagreb, organized by my mentor dr.sc. Tajron Jurić. Link to the workshop's site

Sarajevo School of High Energy Physics 2022 — Sarajevo
University of Sarajevo — October 10-15 2022
- I have attended the school at the Faculty of Science in Sarajevo, organized by University of Sarajevo and CERN. Link to the schools's site

59. Winter School of Theoretical Physics and third COST Action CA18108 Training School "Gravity – Classical, Quantum and Phenomenology" — Jelenia Gora
Institute of Theoretical Physics of the University of Wroclaw, Poland — February 12-21 2023
- Here I held a 20 minute student talk about my first scientific paper. Link to the schools's site

Basics of Quantum Gravity 2023 — Online
Online via Zoom — May 16 - November 16 2023
- I have attended the online school "Basics of Quantum Gravity". Link to the schools's site

Mini symposium on Physics and Geometry 2023 — Zagreb
Institute Ruđer Bošković — June 5-9 2023
- I have attended the conference "Mini symposium on Physics and Geometry" organized by Athanasios Chatzistavrakidis (RBI), Larisa Jonke (RBI), Jan Rosseel (RBI).
  Here I held a 20 minute presentation. Link to the conference's site

Emergent Geometries from Strings and Quantum Fields 2023 — Florence
Galileo Galilei Institute — June 12-16 2023
- I have attended the school organized by Francesco Bonechi.
  Here I held a 5 minute gong presentation. Link to the schools's site

COST CA18108 Fourth Annual Conference 2023 — Rijeka
University of Rijeka, Faculty of Physics — July 10-14 2023

- I have attended the conference organized by Tomislav Terzić and others. Here I held a 20 minute seminar presentation. Link to the conference's site

XXV SIGRAV Conference on General Relativity and Gravitation — Trieste
SISSA — September 4-8 2023

- I have attended the conference organized by SIGRAV comitee. Here I held a 20 minute seminar presentation. Link to the conference's site

Golden Wedding of Black Holes and Thermodynamics — Online
Online via Zoom — December 4-8 2023

- I have attended the conference organized by Níckolas de Aguiar Alves and others. I held a 30 minute seminar presentation. Link to the conference's site

44th Winter School Geometry And Physics — Srni
Masaryk University — January 13-20 2024

- I have attended the school organized by Masaryk University, Union of Czech Mathematicians and Physicists and Charles University. Here I held a 25 minute seminar presentation. Link to the conference's site

## TALKS

I have held presentations/seminars on the following occasions:

- 59. Winter School of Theoretical Physics and third COST Action CA18108 Training School "Gravity – Classical, Quantum and Phenomenology" (Quantum correction to black hole entropy)
- Mini symposium on Physics and Geometry 2023 (Area law in NC geometry)
- Emergent Geometries from Strings and Quantum Fields 2023 (Quantum aspects of BH entropy)
- COST CA18108 Fourth Annual Conference 2023 (Noncommutativity and black hole entropy)
- XXV SIGRAV Conference on General Relativity and Gravitation (Noncommutative Corrections to Black Hole Entropy)
- Golden Wedding of Black Holes and Thermodynamics (Noncommutative correction to black hole entropy )
- 44th Winter School Geometry And Physics (Noncommutative corrections to black hole entropy )

## ARTICLES, THESIS

Noncommutative correction to the entropy of charged BTZ black hole (article) InspireHEP
Institute Ruđer Bošković, Zagreb December 2022

- I have calculated the entropy of a charged BTZ black hole and its corrections due to angular Drinfeld twist in the expansion of the noncommutative parameter $a$.

The Geometry of Standard Model (Master's project) Link
Faculty of Science - Physics department September 2022

- I have developed the formalism of principal and associated bundles, spin structure and geometry on bundles and applied them in order to describe the Standard Model Lagrangian in a geometrical, coordinate free manner.

## HONOURS AND AWARDS

- 2017-2020: Full STEM scholarship for bachelor's STEM students (funded by EU and Croatian Ministry of Science and Education).