

# On-shell amplitudes beyond the classical regime

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Under the supervision of Adam Falkowski

# Where I'm from

I'm from Rome, Italy



Here I also did my  
Bachelor's degree in Physics at  
*La Sapienza University of Rome*



# Where I did my Master

## Master's in High Energy Physics (2 years)

1° year at ETH Zürich (Switzerland)



2° year at Institut Polytechnique de Paris



# What I do in my PhD

I use

## Modern amplitude techniques

- On-shell methods
- Spinor-helicity formalism

To compute

Loop amplitudes  
in gravity

To obtain

Observables for binary black hole  
mergers (eikonal, ringdown phases)

Then I take

Classical / non-relativistic  
(eikonal / Born) limit



# Hobbies

## Travelling and photography (while travelling)



**Thank you!!**