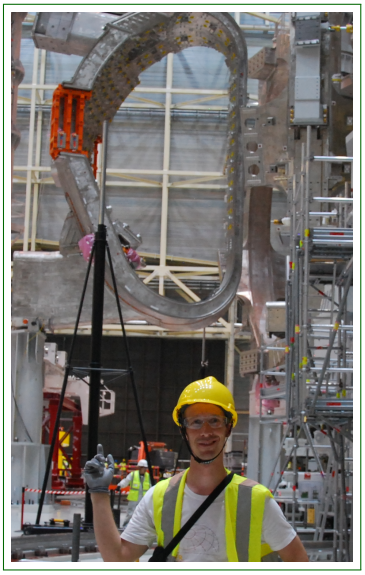
# Philipp Krah - Resumé



I am a computational physicist with a strong foundation in surrogate modeling and numerical methods for solving partial differential equations, especially in the context of fluid and kinetic systems. I am eager to channel my skills into impactful, positive, real-world projects that make a meaningful difference.

## Personal Data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| Birth | 09.02.1990 in Suhl, Germany |
| Address | 6 Rue Gillibert, 13005 Marseille, France |
| Mobile | +33 753086899 |
| E-mail | philipp.l.krah@gmail.com |
| Webpage | philipp137.github.io |


## Education

10/2018 – 12/2022 **PhD - Applied Mathematics**, *Technical University of Berlin*
Thesis: *Model Order Reduction for Transport Dominated Fluid Systems*

4/2014 – 7/2018 **Master of Science - Engineering Science**, *Technical University of Berlin*
Thesis: *Numerical Investigation of Fluid Dynamic Aspects of an Electrodynamic Ion Funnel*

10/2013 – 08/2017 **Master of Science - Physics**, *Humboldt University of Berlin*
Thesis: *The static quark potential in the SU(3) Yang Mills theory at all distances*

10/2009 – 06/2013 **Bachelor of Science - Engineering Science**, *Technical University of Berlin*
Thesis: *A study of the magnetic properties of free cobalt oxide clusters with X-ray magnetic circular dichroism*,

## Experience

11/2022 – present **Post-Doc/Research Assistant**, *French-Canadian Research Project: Aix-Marseille Université and McGill University*
Subject: Advanced numerical and approximation techniques for plasma systems

10/2018 – 07/2022 **Research Assistant**, *Research Training Group DAEDALUS, TU Berlin*
Subject: Surrogate modeling for fluid systems

10/2019 – 03/2021 **Teaching Assistant**, *CFD and Math Department of TU Berlin*
Subject: Advanced numerical methods and machine learning in fluid dynamics.

02/2018 – 03/2018 **Student Research Assistant**, *CFD Department of TU Berlin*
Subject: Wavelet adaptive methods for fluidsystems

08/2011 – 03/2018 **Student Teaching Assistant**, *Math Department TU Berlin*
Subject: Basic and advanced courses in numerics, computer science and mathematical physics

08/2017 – 10/2017 **Research Assistant**, *NIC Research Group - Computational Elementary Particle Physics*, DESY,Zeuthen
Subject: Realization of large scale Monte Carlo simulations in lattice gauge theory

08/2012 – 11/2012 **Internship**, *Helmholtz-Zentrum Berlin - Institute of Methods and Instrumentation for Synchrotron Radiation Research*, Berlin
Subject: Experimental X-ray absorption spectroscopy and analysis of charged clusters

## Languages

German ●●●●● English ●●●◐○ French ●●○○○