

## PERSONAL INFORMATION

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Name: Jan  
Surname: Kotek  
Address: Strakonická 232  
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Email: [jankotek@email.cz](mailto:jankotek@email.cz)  
Year of birth: 1992  
Nationality: Czech

## RESEARCH INTERESTS

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Physics of magnetic reconnection  
Dynamics of the Solar atmosphere  
Application of the Finite Element Method in space and astrophysical plasma physics

## EDUCATION

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2017- **PhD** in Theoretical physics, Astronomy and Astrophysics  
Charles University, Prague  
supervisor: Miroslav Bárta  
topic: Research in space-plasma processes by means of advanced numerical simulations  
2014-2017 **M.Sc.** in Astronomy and Astrophysics at Charles University  
topic: Nonlinear simulations using Finite Element Method  
2011-2014 **B.Sc.** in General Physics at Charles University  
topic: Numerical solution of physical problems leading to the system of PDEs by the Finite Element Method – an introduction

## ATTENDED CONFERENCES

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2018 12<sup>th</sup> International School/Symposium for Space Simulations, Los Angeles:  
3D MHD Discontinuous Galerkin FEM code  
2018 From space, solar and laboratory plasmas to plasma astrophysics - Theory  
and Simulation of Solar System Plasmas, Göttingen: Application of  
Discontinuous Galerkin FEM in astrophysical MHD - discussion  
2018 Week of Doctoral Students: Solar flares and their modelling

2017	IAGA/SCOSTEP Solar variability and coupling effects in the Earth's atmosphere
2017	European Week of Astronomy and Space Sciences – organising staff
2015	12 <sup>th</sup> International School/Symposium for Space Simulations – org. staff
2012	Expo Sciences, Brussels
2011	Open Science, Brno – best physics lecture

#### **RESEARCH PROJECTS**

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2018-2021	Spectroscopy of Dynamic Phenomena in Solar Atmosphere; Charles University student grant GAUK1130218
2010-2012	Open Science II programme for young students: Spectral Analysis of Solar Flares - including data processing pipeline in IDL and data alignment routines. Supervisor: Pavel Kotrč

#### **LANGUAGE SKILLS**

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Czech:	first language
English:	fluent
German:	fair
Spanish:	basics

#### **OTHER ABILITIES**

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Programming skills: C/C++, python, IDL, parallelization  
Administrator of Linux computer lab  
HPC computing  
Driving license B

#### **MISCELLANEOUS**

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2018–	Solar patrol at Ondrejov observatory
2007	Winner of ESO Catch a Star! competition: Research and Observation of the Solar Eclipse