# Nicolas Scepi

# Research interests

*Objects*: Accretion disks, dwarf novae, X-ray binaries, protoplanetary disks, winds, jets *Processes*: accretion, disk instabilities, plasma instabilities, turbulence, convection, state transitions *Methods*: MHD simulations, radiative transfer, phenomenological models, analytical approaches

#### Education

- since Oct. PhD in Astrophysics, Institut de Planétologie et d'Astrophysique de Grenoble
  2016 (IPAG), Subject: Transport of angular momentum in accretion disks of dwarf novae, Supervisors: Guillaume Dubus and Geoffroy Lesur.
  Defense planned in July 2019.
- 2015 2016 Master specialization in Plasma Physics with highest honors, UPMC (Paris), Ecole polytechnique and Université Paris-Saclay.
- 2010 2013 Bachelor with high honors and Master in theoritical physics, Ecole normale supérieure (ENS) de Cachan.

# **Refereed Publications**

Scepi, N., Lesur, G., Dubus, G. & Flock, M., Turbulent and wind-driven accretion in dwarf novae threaded by a large scale magnetic field, A&A, 620, A49, (2018b). Selected as an A&A 2018 Highlight.

Scepi, N., Lesur, G., Dubus, G. & Flock, M., Impact of convection and resistivity on angular momentum transport in dwarf novae, A&A, 609, A77, (2018a).

Durret, F., Adami, C., Bertin, E., Hao, J., Muez, I., Martinet, N., Maurogordato, S., Sauvaget, T., Scepi, N., Takey, A. & Ulmer, M. P., Galaxy clusters in the SDSS Stripe 82 based on photometric redshifts, A&A, 578, A79, (2015).

# Submitted Publications

Scepi, N., Dubus, G. & Lesur, G., Magnetic wind-driven accretion in dwarf novae, Arxiv e-prints 1812.02076, (2018c). Submitted to A&A.

#### Presentations and Workshops

- July 2019 Amsterdam (Netherlands), "From winds to jets" Workshop, Invited review talk on "Outflows from quiescent cold disks".
- Nov. 2018 MPIA Heidelberg (Germany), Lab Seminar.
- Oct. 2018 Autrans (France), ANR CHAOS Workshop on X-ray binaries, Contributed talk.
- Oct. 2018 IAP Paris (France), National high energy physics meeting, Contributed talk.
- July 2018 Pasadena (USA), 42nd COSPAR Scientific assembly in session: Nova eruptions, cataclysmic variables and related systems: observational vs. theoretical challenge, Contributed talk.
- July 2018 Oxford (UK), 70th birthday of John Papaloizou "Planets, Stars and Discs: A Golden Age for Particle and Gas Dynamics", Contributed talk.
- July 2017 Paris (France), SF2A in High energy physics session, Contributed talk.

May 2017 Les Houches (France), Workshop, From laboratories to astrophysics: the expanding universe of plasma physics, Poster presentation.

## Teaching

- 2016 2018 Teaching assistant in geometrical optics and classical mechanics: 100 hours.
- 2014 2015 High school teacher in mathematics: 5 months.

## Institutional responsibilities

- 2017 Elected member of IPAG laboratory council.
- 2017 Organizer of bi-monthly PhD seminars.

#### Referee activity

2018 – Referee of one A&A paper.