



July 11, 2025

To whom it may concern,

It is my pleasure to strongly recommend Dr **Evangelia Ntormousi** in connection with her application for the tenure track position under the the selection announcement “Procedura Pubblica di Selezione per il Reclutamento Di 1 Ricercatore/Ricercatrice”. I am professor at Nordita since 2000. Administratively, Nordita is under Stockholm University, where I am also Professor of Astronomy. I met Dr Eva Ntormousi for the first time in 2017 when she co-organized a one-month program at Nordita on the subject of phase transitions in astrophysics: from the ISM to planets.

Later in 2020 during Corona times, I met her again and became more familiar with her work. I invited her to our Virtual Nordic Dynamo Seminar. She spoke about her just published paper in which she states that a dynamo amplifies the magnetic field of a Milky Way-like galaxy. Her presentation not only made a convincing case that a large-scale magnetic field is generated by a helical dynamo process, but it also demonstrated her close familiarity with the subject and all the literature in the surrounding field.

She continued attending our online seminar series and during our subsequent online discussion sessions, we got interested in the question of how to quantify the presence of dynamo action in time-dependent flow in the presence of gravitational collapse. The subject got reinvigorated by a subsequent online talk by Siyao Xu on nonlinear turbulent dynamo during gravitational collapse. This was when Eva and I got regularly together to develop new simulations on the subject. It turned out to be a very fruitful collaborations that led to a paper that we published in 2022. During that time, I got hands-on experience with her sharp mind and thorough approach to scientific problems, but also with her vast knowledge of the literature in the field.

We continued working together and I invited her to join me on a review in the Annual Reviews of Astronomy and Astrophysics. Here, her deep knowledge of the literature proved particularly useful. This was a major piece of work that we finished in 2023. Her persistence and efficient working was instrumental in making this a success.

We continued to meet also in person at various programs, both at Nordita in 2022 and at the KITP in Santa Barbara in 2024. During all these times, she appeared as a well-connected scientist working in a broad range of fields, using both numerical and observational approaches. More recently, we started working on the realistic modeling of polarized dust and synchrotron emission from various types of small-scale dynamo simulations. This work is still ongoing, but she made promising progress. In the meantime, a paper by another set of authors appeared that made close connections with the 2022 paper of Eva and myself. Using a coordinate transformation that I introduced earlier into the PENCIL CODE, it was easy to extend the scope of this recent paper to collapse simulations without the previously used driving. Owing to

Eva's expertise in the field, we were able to produce a new paper within a relatively short amount of time and are now awaiting its final acceptance.

Eva has always been giving excellent talks. She has great talent attracting the attention of the audience and making them engaged in the discussions. This also gives me confidence in assessing her ability to perform in teaching. My positive impression is also supported by strong track record in supervising students.

In conclusion, I am confident that Eva has a great scientific career ahead of her. She is very efficient in envisaging new scientific problems, performing the relevant research, and producing papers and getting them out. She has everything it takes in continuing being a highly productive scientist. I have therefore no doubt that we will be an excellent choice for your faculty position at the CEA astrophysics department.

Yours sincerely,

A handwritten signature in blue ink, reading "Axel Brandenburg". The signature is fluid and cursive, with the first name "Axel" and last name "Brandenburg" clearly distinguishable.

Axel Brandenburg
(Professor)