The 2021 Kees de Jager Prize of the journal *Solar Physics*

Best Article of 2020

16th European Solar Physics Meeting (ESPM-16), September 2021 Solar Physics

D Springer

Cornelis "Kees" de Jager

(29 April 1921 – 27 May 2021)

Astronomer, organizer, diplomat

- IAU General Secretary (1967 1973)
- COSPAR President (1972 1978 and 1982 1986)
- Director Astronomical Institute and Laboratory for Space Research Utrecht (1961 – 1982)

Founding Editor-in-Chief

- Space Science Reviews (1962 2003)
- Astrophysics and Space Science Library (1965 1995)
- Solar Physics (1967 1997)



Photo: Bob Bronshoff

Space Science Reviews & Astrophysics and Space Science Library

177/1-4

SPACE

SCIENCE

REVIEWS

SSR

- 1st issue in January 1962
- suggested by Kees de Jager since he "felt the need for a medium in which highstandard review articles could be found on various aspects of space research, scientific as well as technological"
- covers space research in its broadest sense, so as to enable scientists from different disciplines to learn about problems and achievements in fields other than their own

ASSL

- 1st volume in 1965:
 "The Solar Spectrum"
- book series covering a broad range of subjects in Astrophysics, Astronomy, Cosmology, and Space Science
- authors are distinguished specialists their fields of expertise



Solar Physics

A Journal for Solar and Solar-Stellar Research and the Study of Solar-Terrestrial Physics

Journal history

- launched in 1967 by two solar physicists from opposite sides of the Iron Curtain, Cornelis de Jager and Zdeněk Švestka
- then and now, the only journal specializing in Solar and Solar-Terrestrial Physics, later extended to Solar-Stellar Research
- includes astrophysical, geophysical, and space research
- 54 years, 295 volumes, and over 11,000 articles!
- published by Springer Nature, since 2015 in collaboration with Living Reviews in Solar Physics



The Kees de Jager Prize

For the Best Article in Solar Physics of 2020

Inaugural Award 2021

- new annual best article award
- motivation: honoring the founding editor of *Solar Physics* and *Space Science Reviews* Cornelis "Kees" de Jager, who passed away just weeks after celebrating his 100th birthday in May 2021, and acknowledging the work of our authors by highlighting outstanding research articles
- carries a certificate and a cash award of €1000 sponsored by Springer Nature

The Kees de Jager Prize, established in 2021 in honor of Cornelis "Kees" de Jager, is awarded annually by Springer Nature to the best article in the journal Solar Physics. The winner is selected by the Editors and the Advisory Board from all publications of the previous year.

... and the winner is

1st Kees de Jager Prize Best Article of 2020 in the journal *Solar Physics*

Anthony Yeates (Durham University, UK): "How Good Is the Bipolar Approximation of Active Regions for Surface Flux Transport?" Solar Physics 295, 119 (2020)

- Science results: The article investigates how representing active regions with bipolar magnetic regions
 (BMRs) affects the end-of-cycle polar field predicted by the surface flux transport model, one of the key
 questions of modelling solar cycles. It finds that bipolar approximation leads to a 24% overestimate of
 the net axial dipole moment, which can explain why previous flux transport models had to reduce BMR
 tilt angles to obtain realistic polar fields.
- Form: The article is an outstanding example of open science: open access, open data, and open code!

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Solar Physics

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