

## Editorial

**Citation for published version (APA):**

Hütter, M. (2019). Editorial. *Journal of Non-Equilibrium Thermodynamics*, 44(3), 215.  
<https://doi.org/10.1515/jnet-2019-5002>

**DOI:**

[10.1515/jnet-2019-5002](https://doi.org/10.1515/jnet-2019-5002)

**Document status and date:**

Published: 01/07/2019

**Document Version:**

Publisher's PDF, also known as Version of Record (includes final page, issue and volume numbers)

**Please check the document version of this publication:**

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

**General rights**

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

[www.tue.nl/taverne](http://www.tue.nl/taverne)

**Take down policy**

If you believe that this document breaches copyright please contact us at:

[openaccess@tue.nl](mailto:openaccess@tue.nl)

providing details and we will investigate your claim.

Markus Hütter\*

# Editorial

<https://doi.org/10.1515/jnet-2019-5002>

Dear readers,

Last year, 63 participants from 18 countries gathered for the 8<sup>th</sup> edition of the International Workshop on Non-Equilibrium Thermodynamics IWNET (see <http://www.nonequilibrium-thermodynamics.org> for more details), which was organized by Markus Hütter (Eindhoven University of Technology) and Leonard Sagis (Wageningen University and Research) and was held in Sint-Michielsgestel, close to the city of 's Hertogenbosch in the Netherlands. Previous meetings in this series took place in Montréal (1996), Oxford (2000), Princeton (2003), Rhodes (2006), Cuernavaca (2009), Røros (2012), and Hilvarenbeek (2015).

The 5-day workshop consisted of invited lectures, regular presentations, poster sessions, and discussion sessions, on the following topics:

<i>Topic:</i>	<i>Invited speaker:</i>
New Conceptual Developments	Alexander Gorban (University of Leicester, UK)
Complex Fluids and Solids	Mike Cates (University of Cambridge, UK)
Large Fluctuations	Hugo Touchette (Stellenbosch University, South Africa)
Quantum Dissipation	Armen Allahverdyan (Yerevan Physics Institute, Armenia)

The topics thus ranged from the fundamentals of non-equilibrium thermodynamics in general, establishing links to other branches of physics and mathematics (large fluctuations, quantum dissipation), to the rather applied field of mechanical behavior of complex materials.

This issue of the Journal of Non-Equilibrium Thermodynamics contains four peer-reviewed publications of work that has been presented at the workshop last year. Particularly, the contributions are the following: In the field of New Conceptual Developments, Miroslav Grmela, Michal Pavelka, Vaclav Klika, Bing-Yang Cao, and Nie Bendian present “Entropy and entropy production in multiscale dynamics” (pp. 217–233); in the field of Complex Fluids and Solids, Paul M. Mwasame, Norman J. Wagner, and Antony N. Beris describe “Microinertia effects in material flow” (pp. 235–246), and Mátyás Szücs and Tamás Fülöp elaborate on “Kluitenberg-Verhás rheology of solids in the GENERIC framework” (pp. 247–259); in the field of Quantum Dissipation, Walter Aschbacher presents his results on “A rigorous scattering approach to quasifree fermionic systems out of equilibrium” (pp. 261–275).

The 9<sup>th</sup> workshop in this series, IWNET2021, will take place in 2021 in Victoria, Canada, and will be organized by Henning Struchtrup (University of Victoria).

Markus Hütter  
Guest editor

---

\*Corresponding author: Markus Hütter, Eindhoven University of Technology, Department of Mechanical Engineering, Polymer Technology, Gem-Z 4.145, P. O. Box 513, 5600 MB Eindhoven, the Netherlands, e-mail: m.huetter@tue.nl