



USACM News

October 2025

USNCTAM'26

The [20th U.S. National Congress of Theoretical and Applied Mechanics](#) will be held in Pasadena, California on June 21-25, 2026.

USNCTAM'26 will foster and promote the exchange of ideas and information among the various disciplines of the theoretical and applied mechanics community around the world, and chart future priorities in mechanics related research, applications and education.

[Short Course Proposals](#) are now open.

[Abstract Submissions](#) are now open.

AFRICOMP7

The **7th African Conference on Computational Mechanics** (Cape Town, 25 – 27 February 2026) will address latest developments and applications in the fields of computational and applied mechanics, with a [full list of conference themes on our website](#). The technical programme will feature standard conference sessions, as well as a range of minisymposia and [Keynote presentations](#).

Deadline extension for abstracts: 15 November 2025

We invite prospective delegates to submit an abstract for the general conference program. For detailed submission guidelines, please refer to the [instructions available on our website](#).

Conference proceedings with high-profile open access publications

All accepted abstracts will be published in the conference proceedings and authors will be required to present their work in an oral presentation during the conference. In addition, all authors of accepted abstracts are invited to submit a full paper (optional). Full papers will be subject to peer-review and accepted papers published (free of charge) in a special edition “Current Problems and Advances in Computational and Applied Mechanics (AfriComp7)” in the open access online Journal MCA (Mathematical and Computational Applications,

<http://mdpi.com/journal/mca>).

Accommodation: Early booking is strongly recommended

Please check our [website for hotel recommendations and](#) associated information. We have negotiated special rates for conference delegates at hotels very close to the conference venue (and hence also in the heart of the V&A Waterfront with its numerous attractions, culinary options, shopping opportunities, museums, parks, direct coastline access, etc.). We recommend booking accommodation as early as possible, as February is a very busy month in Cape Town, and hotels book out very fast, especially those in the V&A Waterfront.

TTA Corner

Energy & Earth Systems

- Our next webinar will take place on **November 11, 2025 at 8:00AM PST**. The speaker will be William C. Radünz from Johns Hopkins University speaking on "Multiscale simulations of atmosphere–wind farm interactions and the role of spatial gradients on power performance and wake recovery".

Join via Zoom:

<https://us06web.zoom.us/j/89805920868?pwd=UaxOZeVHZAs9BeKkjqRWbNadZYCIzo.1>

Large Scale Structural Systems and Optimal Design

- Our next colloquium will take place on **November 5, 2025 at 1:00PM CST**. The speaker will be Kenny Swartz from Lawrence Livermore National Laboratory speaking on "Design Optimization for Mechanical Logic Gates".

Join via Zoom:

<https://us06web.zoom.us/j/87331120699?pwd=MExkQ085ZHh1aDc3ZnBwQzFIUHI4UT09>

Nanotechnology and Lower Scale Phenomena

- Our next webinar will take place on **November 25, 2025 at 3PM EST**. The speaker will be Prof. Heather Kulik from Massachusetts Institute of Technology.

Join via Zoom:

<https://us06web.zoom.us/j/84541274013?pwd=ZDhuM09BaUIVVI BuREhEV0sweGFIZz09>

Novel Methods in Computational Engineering and Sciences

- Our 2025 Fall Seminar Series will take place on **October 24, 2025 at 10AM EDT**. The first speaker will be Paola F. Antonietti, MOX from Laboratory for Modeling and Scientific Computing speaking on "Computational Modeling of Human Brain Neurodegeneration". The second speaker will be Amirhossein Arzani from University of Utah speaking on "Interpretable data-driven model discovery with global optimization: dynamical systems, ROMs, and operators".
Join via Zoom: <https://utah.zoom.us/j/84332086970>

Uncertainty Quantification and Probabilistic Modeling

- Our next webinar will take place on **September 18, 2025 at 3PM EDT**. The speaker will be Yue Yu from Lehigh University speaking on "How Foundation Model Discovers Physics from Small Data?".
Join via Zoom:
<https://us06web.zoom.us/j/92756548524?pwd=cTFoRXIvNVN4dVFoaHEzK0pQQjhldz09>
- Following this, our subsequent webinar will take place on **November 13, 2025 at 3PM EST**. The speaker will be Drew P. Kouri from Sandia National Laboratories speaking on "An Inexact Trust-Region Algorithm for Nonsmooth Risk-Averse PDE-Constrained Optimization".
Join via Zoom:
<https://us06web.zoom.us/j/92756548524?pwd=cTFoRXIvNVN4dVFoaHEzK0pQQjhldz09>

Student Chapter Corner

- Join the community online at the [USACM Student Chapter Discord Server](#).

- Our next webinar will take place on **October 22, 2025 at 3PM EDT**. The speaker will be Pan Du from University of Notre Dame.

Join via Zoom:

<https://us06web.zoom.us/j/82464478256?pwd=ZMkJVFdjMJzadgnVWFpQsdUSs4qTaY.1>