## Publications List - Avner Cohen

## Peer reviewed journals

- Multi-Group Discontinuous Asymptotic P<sub>1</sub> Approximation In Marshak Waves Experiments, A. P. Cohen, and Shay I. Heizler, JQSRT, 272, 107822 (2021).
- 2. Key to understanding supersonic radiative Marshak waves using simple model and advanced simulations **A.P. Cohen**, G. Malamud and S. I. Heizler *Phys. Rev. Research* **2**, 023007 (2020).
- The Discontinuous Asymptotic Telegrapher's Equation (P1) Approximation A. P. Cohen, and Shay I. Heizler, Nuclear Science and Engineering, 192, 189 (2018).
- Modeling of Supersonic Radiative Marshak waves using Simple Models and Advanced Simulations, A. P. Cohen, and Shay I. Heizler JCTT, 47, 378 (2018).
- Photo-crosslinkable colloidal: from fluids structure and dynamics of spheres to suspensions of ellipsoids, A. P. Cohen, M. Alesker, A. B. Schofield, D. Zitoun and E. Sloutskin, Gels, 2, 29 (2016).
- Dipolar colloids in a polar media: direct microscopy of two-dimensional suspensions. E. Janai, A. P. Cohen, A. Butenko, A. B. Schofield M. Schultz and E. Sloutskin, Scientific Reports, 6, 28578 (2016).
- Structural transition in a fluid of spheroids: a low-density vestige of jamming, A. P. Cohen, S. Dorosz, A. B. Schofield, T. Schilling and E. Sloutskin, *Phys. Rev. Lett.* 116, 098001 (2016).
- Structural and interactions in fluids of prolate colloidal ellipsoids: Comparison between experiment, theory and simulations. A. P. Cohen, E. Janai, D. C. Rapaport, A. B. Schofield and E. Sloutskin, J. Chem. Phys. 137, 184505 (2012)
- Fluids suspensions of colloidal ellipsoids: direct structural measurements. A. P. Cohen, E. Janai, E. Mogilko, A. B. Schofield and E. Sloutskin, *Phys. Rev. Lett.* 107, 238301 (2011).

## Oral presentations

- 1. Radiative Marshak waves experiments via the discontinuous asymptotic P1 approximation, IPS, 20201 (talk).
- The key to understanding supersonic radiative marshak waves

DPP, Portland, 2018 (talk).

- 3. Fluids of colloidal ellipsoids: trading free volume for freedom of rotation, BIU-WIS UCMRS Materials Science Student Conference, 2014 (talk).
- 4. Fluids of colloidal ellipsoids: trading free volume for freedom of rotation, The annual meeting of Israel Physical Society, Hebrew University, Israel, 2012 (talk).

5. Fluids suspensions of colloidal ellipsoids: direct structural measurements, The annual meeting of Bar-Ilan Institute of Nanotechnology and Advanced Materials, Israel, 2011 (talk).

## **Posters**

- 1. Fluids of colloidal ellipsoids: trading free volume for freedom of rotation, Workshop on dynamics in viscous liquids 4, Montpellier 2015 (poster).
- 2. Fluids of colloidal ellipsoids: trading free volume for freedom of rotation, The International Soft Matter Conference, Rome, 2013 (poster).
- 3. Fluids of colloidal ellipsoids: trading free volume for freedom of rotation, Batsheva de Rothschild Seminar on Soft Matter and Biophysics, Ein-Bokek, Israel, 2013 (poster).
- 4. Fluids suspensions of colloidal ellipsoids: direct structural measurements, The annual meeting of Israel Physical Society, Tel-Aviv University, Israel, 2010 (poster).