



# Zoom ISIG Ninth ISIG Symposium, 22 Sept. 2020

Date: Tuesday, Sept. 22, 2020

Location: Zoom Meeting

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9:00-9:15 **Opening remarks**: Emanuel Zvi Liban, AEAI

Dov Sherman, ISIG President,

9:15-10:00 Plenary Lecture: Chair: Abe Brot

Ofer Levi, IDF. Failure Analysis in IAF - Quantitative fractography capability.

## 10:00-10:15 *Coffee Break*

## **Morning Session** – Chair: Leslie Banks Sills

10:15-10:35 Leslie Banks Sills, Tel Aviv University. Failure criteria for an interface delamination.

10:35-10:55 **Daniel H. Wagner**, Weizmann Institute of Science. Extreme scale-dependent tensile properties of an epoxy resin.

10:55-11:15 **Jay Fineberg**, The Hebrew University of Jerusalem. How moving cracks in brittle solids choose their path.

11:15-11:35 **Daniel Rittel**, Technion. Impact response of thermoreversible methylcellulose hydrogels.

### 11:35-11:50 Coffee Break

#### Morning Students' Session— Chair: Chanan Gabay

- 11:50-12:10 **Ido Simon**, Tel-Aviv University. Debonding failure prediction of secondary bonded composite laminates.
- 12:10-12:30 **Lior Bachar**, Ben-Gurion University. Diagnostics of gears transmissions via optic fiber Bragg grating sensors.
- 12:30-12:50 **Sagi Chen**, Technion. A numerical study of void shear coalescence at the microstructural level in ductile materials.
- 12:50-13:10 **Carol W. Rodricks**, Weizmann Institute of Science. Strength and toughness tuning of fibre-reinforced composites through interfacial topographical obstacles.

#### 13:10-14:00 *Lunch Break*

# **Afternoon Session** – Chair: Jacob Bortman.

- 14:00-14:20 **Abe Brot**, Israel Aircraft Industry. A Survey of Structural Integrity Failures of Commercial and Military Aircraft.
- 14:20-14:40 **Oz Golan**, Afeka Academic College of Engineering. Mechanical simulations by using micro-CT as an effective method for failure analysis and structural analysis.
- 14:40-15:00 **Shai Feldfogel**, Technion. Non-self-similar interface crack propagation in layered plates
- 15:00-15:20 **Dov Sherman**, Tel-Aviv University. Brittle fracture to the atomistic scale.

# 15:20-15:30 *Closing Remarks*