

Morphing at the Canteen

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Discrete research is currently conducted around the globe in the development of so-called “morphing” structural components, which might significantly improve the performance of aircraft. A “morphing object” can modify its shape and dimensions to change its interaction with its surroundings. The basic idea behind this buzzword is to introduce new capabilities for shape control, vibration damping, noise reduction, and flow manipulation. Institutions like NASA and top universities everywhere, including the Weizmann Institute of Science, are, of course, very interested in this.

A key factor in developing morphing structures is the research in smart materials by smart researchers. At the Weizmann Institute, even owners of cafeterias are hunting for Nobel Prizes (everybody is really smart here). Significant progress in morphing was recently achieved in one of our canteens (curiously enough, *morfon* in Spanish means ‘one who enjoys eating’. Perhaps this explains that. OK, maybe not ...).

The pictures reveal the striking effects of (even mild) humidity and temperature variations on a covert airplane wing camouflaged as a wooden cafeteria table. Friendly connections at Israel Aircraft Industries (IAI) whispered that experiments are currently being run as a discrete collaboration between the Weizmann Institute and IAI. All Top Secret, of course ...



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