



Department of Engineering

# Innovative Applications of Double Double Design in Fiber-Reinforced Composite Structures

**March 10th 2025 - 10.00**

Department of Engineering, via Roma 29, Aversa, Aula Magna

Greetings and Introduction

**Prof. Aniello Riccio, Università degli studi della Campania Luigi Vanvitelli**

Speaker

**Prof. Stephen W. Tsai, Stanford University**



*Stephen W. Tsai earned his BE in 1952 and DEng in 1961 from Yale University. Throughout his career, he contributed to Ford Motor Company, Washington University, the US Air Force Materials Laboratory, and Stanford University.*

*He is renowned for his work on the Tsai-Hill failure criterion, lamination parameters (in collaboration with Pagano), the Tsai-Wu failure criterion and strength ratios, and the Halpin-Tsai micromechanics formula.*

*His contributions also include the trace, master ply, omni envelopes, and unit circle failure criterion (with Melo), the development of double-double laminates, and the Lam search method (with Massard and Shah).*

*Additionally, he played a key role in the development of metallic grid/ $[\pm 60]$  CFRP skin for glueless assembly (in collaboration with Zheng, Wang, Kappel, and Jin). Since 1995, he has been a member of the US National Academy of Engineering*