Paper ID: 46681 oral

## IAF MATERIALS AND STRUCTURES SYMPOSIUM (C2) Advanced Materials and Structures for High Temperature Applications (4)

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## KEYNOTE: SANTINI LECTURE, GIVEN BY GERBEN SINNEMA: SAFETY OF SPACEFLIGHT STRUCTURES - THE APPLICATION OF FRACTURE AND DAMAGE CONTROL

## Abstract

Since Apollo it has been necessary to ensure the safety of spaceflight structures by fracture and damage tolerance methods. Fracture and damage control cover a wide range of structural and materials engineering disciplines. This paper will present a brief overview of the history, the current state of art, and new developments in implementing fracture and damage control to assure spaceflight structural integrity.