

Laserové centrum HiLASE Vás zve na seminář

Fatigue life of aircraft structures: Issues for crack initiation and propagation modelling

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Aircraft structures are designed for long operative lives, more than 20 years of usage. This requirement, together with the stringent request for low weight, has the consequence that fatigue design is a specific issue to be taken into great consideration. The airworthiness regulations have progressively introduced more stringent and updated requirements, and the design against fatigue events is a high priority issue; therefore, many research activities have been carried out in the last 50-60 years, addressed towards the study of the fatigue behaviour of aircraft structures. The seminar will discuss some aspects of the fatigue behaviour of typical aeronautical materials and of the testing activities typically performed for the qualification of materials and structures, giving also an overview of the existing analysis methods used for the assessment of the fatigue life of components. Moreover, the crack propagation phase will also be discussed, with emphasis on the various parameters that have an influence on such phenomenon. The seminar will conclude with the presentation of the currently used methodologies for crack growth predictions under spectrum loading.

který se bude konat ve čtvrtek 26.11. 2015 od 14:00

v přednáškové místnosti laserového centra HiLASE

Za Radnicí 828, Dolní Břežany