

# **European Safety and Reliability Conference**

### esrel2021.org

## CALL FOR ABSTRACTS

#### Special session on

## Mathematical Models in Maintenance

Description. The aim of this special session is to present works on the use of classical mathematical models, or the development of new ones, in maintenance theory.

Motivation. Many maintenance problems require the use of mathematical tools. For example, a mathematical model allows to forecast imminent failures in a system. Once the mathematical model is constructed, the implementation of optimization techniques allows determine optimal maintenance cycles. If the variables involved in the maintenance problem vary randomly, the associated uncertainty is properly handled only through probabilistic models. Hence, mathematical models play an important role in developing the science of maintenance.

Objective The objective of this special session is to bring together the views of researchers in this subject that will be useful for researchers, academicians and the related industry.

Organizer. Inma T. Castro. Department of Mathematics, University of Extremadura