



# fatigue design2021

## 9<sup>th</sup> edition

of the International conference on fatigue design

**PARTNER COUNTRY: GERMANY**



17 & 18  
November 2021  
Senlis - France

[fatiguedesign.org](http://fatiguedesign.org)

Call for Papers



## Objectives

The 9<sup>th</sup> Fatigue Design conference held in 2021 aims to present the most innovative approaches and scientific progress in design methodologies, tools, and equipment's life extension, focusing on industrial applications. For this edition, a focus is made on the contribution of Big Data and Artificial Intelligence to the fatigue design world.

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## Themes

The selected topics concern the various aspects of fatigue design:

- experimental and numerical design and validation methods,
  - damage tolerance and fatigue life,
  - reliability-based approaches and probabilistic methods,
  - fatigue under severe environmental conditions (corrosion, low temperature, . . .),
  - nonlinear behavior and cumulative damage,
  - fatigue of assemblies (mechanical, welded, adhesive-bonding, multimaterials, . . .),
  - composites and elastomers,
  - bio-mechanical and orthopaedic implant,
  - contact fatigue,
  - vibration fatigue,
  - complex loadings,
  - thermal and thermo-mechanical fatigue,
  - taking into account manufacturing process in fatigue analysis (effect of microstructure, welding, residual stresses, . . .),
  - fatigue of Shape Memory Alloys,
  - additive manufacturing.
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## Organization

Language: conferences will be in English.

Exhibitors: an exhibition will be held during the conference. You have the possibility to present your products and services in the field corresponding to the themes during the conference. A sponsoring is also possible.

Download the booking form or sponsoring document from conference website.

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## Informations for authors

All abstracts have to be registered online at [www.fatiguedesign.org](http://www.fatiguedesign.org).

All selected Fatigue Design 2021 papers will be published online on ScienceDirect via Elsevier Procedia Structural Integrity, which will be made available worldwide for a better dissemination and maximum exposure. The number of the Fatigue Design 2019 papers downloaded from the Elsevier Procedia Structural Integrity website has reached several thousands, after 6 months, with an average of 400 downloads per article.

For the fourth time, the organizing committee has decided to dedicate the conference to the scientific community from a specific country. After USA in 2015, Italy in 2017 and Japan in 2019, in respect to German advance research works in the area of fatigue and fracture mechanics in the last years, it has been decided to consider Germany as the « partner country » for this conference.

## Organizing committee

**F. Lefebvre** (*Cetim/SF2M*), **P. Souquet** (*Cetim*), **S. Courtin** (*EDF R&D/SF2M*), **F. Morel** (*Arts et Métiers/SF2M*),  
**S. Duarte** (*Cetim*), **F. Dubreuil** (*Cetim*)

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\*SF2M Fatigue commission

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## From the partner country, Germany

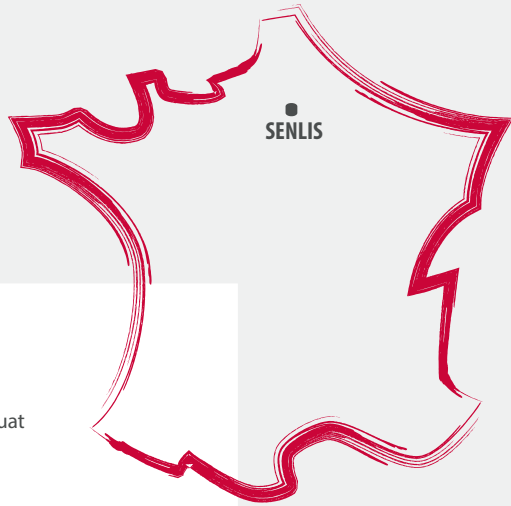
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**Deadline for submission of abstracts:**  
**10/12/2020**

**Acceptance notification:**  
**12/02/2021**

**Authors' registration:**  
**30/04/2021**

**Deadline for submission of full texts:**  
**18/06/2021**



## Location

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## Access

25 km drive from the Paris  
Charles-de-Gaulle airport,  
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## Usefull information & Registration

[www.fatiguedesign.org](http://www.fatiguedesign.org)

