

# ESIAM19

TRONDHEIM NORWAY  
9 - 10 - 11 SEPT. 2019

First European Conference on Structural Integrity  
of Additively Manufactured Materials



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### Aim

Structural integrity, i.e. the fracture and fatigue strength of additively manufactured materials and components is becoming increasingly important with the technology's transition towards major industrial utilization. The conference will provide an overview over current scientific knowledge and stimulate ideas for future research directions in this emerging field. Peer-reviewed contributions will be in the form of a 20-minute presentation or a poster. The agenda will allow for extended discussions and for exploring Trondheim in one of the most pleasant times of the year. ESIAM19 will be the opening event for a yearly international conference series held alternating in Europe and worldwide.

### Background

Additive manufacturing (AM) techniques offer the potential to economically fabricate customized parts with complex geometries in a rapid design-to-manufacture cycle. Before benefits can be explored in critical load bearing applications, the basic understanding of the mechanical and functional behavior of these materials must be substantially improved at all scales. In particular, a better understanding of fracture and fatigue performance is key. The conference will shed light on the basic physical phenomena of fatigue and fracture of AM materials and develop effective criteria for the design of unprecedented high performing components for next generation automotive, aerospace and biomedical applications.

### Conference Papers

Peer reviewed publications from conference contributions and discussions will appear in the conference website. Extended versions of selected papers will be invited for Special Issues in ESIS affiliated journals.

### DEADLINES

Abstracts  
1 November 2018

Conference Papers  
1 April 2019

Registration  
1 April 2019



Organized by ESIS TC 15  
Structural Integrity of Additive  
Manufactured Components  
(In-TEAM TC 15)  
[www.structuralintegrity.eu](http://www.structuralintegrity.eu)

**Sponsorship** Companies interested in presenting their products, processes and achievements relating to the subject are welcome to support this event.

**Please contact by e-mail: [info@esiam.eu](mailto:info@esiam.eu)**

**Conference Venue** Clarion Hotel & Congress Trondheim, Brattørkaia 1, 7010 Trondheim



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