

IGF Video recordings

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**The 7th International
Conference on Crack Paths**



The 7th International Conference on Crack Paths – CP 2021

The 7th International Conference on Crack Paths (CP 2021) was organised by TC3 Fatigue of Engineering Materials and Structures of the European Structural Integrity Society (ESIS). The CP 2021 edition took place in a virtual format (September 21st to 24th, 2021) due to disorders caused by the pandemic COVID-19 situation.

Chairpersons

Sabrina Vantadori	(Department of Engineering & Architecture, University of Parma, Italy)
Stefano Natali	(Department Chemical Engineering Materials Environment, Sapienza University, Rome, Italy)
Francesco Iacoviello	(Department of Civil and Mechanical Engineering, University of Cassino and Southern Lazio, Cassino, Italy)
José António Correia	(INEGI & CONSTRUCT, Faculty of Engineering, University of Porto, Porto, Portugal)
Andrea Carpinteri	(Department of Engineering & Architecture, University of Parma, Parma, Italy)
Filippo Berto	(Department of Mechanical and Industrial Engineering, Faculty of Engineering, Trondheim, Norway)

Main Topics of the Conference

Crack growth can take place under both static and fatigue loading. The complete solution of a crack growth problem includes the determination of the crack path. The crack path in critical components or structures where crack propagation occurs can determine whether failure is benign or catastrophic. Knowledge of potential crack paths is also needed for the selection of appropriate non-destructive testing procedures.

This Conference follows the Conferences in Parma in 2003 and 2006, Vicenza in 2009, Gaeta in 2012, Ferrara in 2015, and Verona in 2018.

Members of different industrial laboratories and scientists from all over the world are invited to contribute with presentations on any of the following topics (in the case of both static and fatigue loading):

- Experimental Determination of CP
- Theoretical Prediction of CP
- Integrity Assessments based on CP Evaluation
- Microscopic Aspects of CP
- CP of Surface Cracks
- CP of Short Cracks
- Effect of Large Scale Yielding on CP
- Effect of Material Inhomogeneities on CP
- Effect of Non-Proportional Cyclic Loading on CP
- Effect of Environmental Conditions on CP
- CP in Advanced Materials
- Laboratory Methods of Controlling CP
- In-Service Inspection of CP
- Application of CP Concepts and Data in Design
- CP in Additive Manufacturing Processes
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