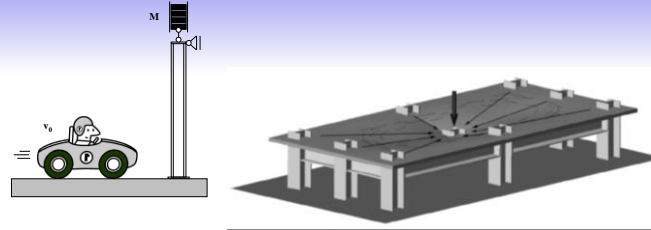


In the frame of the workshop the presentation of results of the **RobustImpact** research work will give a deeper insight into the project. The two topics of “**Robustness**” and “**Impact design**” will be introduced and different design strategies will be summarized. Design examples for steel and composite buildings will be presented.

Workshop RobustImpact



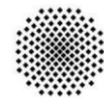
Robust impact design of steel and composite building structures



Project sponsors



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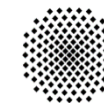


INSTITUT NATIONAL
DES SCIENCES
APPLIQUÉES
RENNES

Stuttgart

16th June 2015

09:00 - 13:00 a.m.



Universität Stuttgart
Germany

CONTENT

Within the RFCS-CT-2012-00029 project **RobustImpact** two different design methods are combined: On one hand possible **impact** scenarios are defined and the **residual strength** of the impacted column is investigated. On the other hand the **robustness** (the redundancy of the structure after a column loss) has been investigated and the activation of **alternate load paths** within a structure through development of catenary action and membrane effects has been investigated. As for the activation of alternate load paths the design of the joints plays an important role the behavior of column bases as well as beam-to column joints has been investigated. As the impact at a column is a dynamic action additionally the dynamic effects on steel and composite members are examined. A short overview on the experimental, numerical and analytical test campaign and results is given in the workshop.

Finally design examples will be presented in order to show how the gained knowledge could be implemented into the standard design of structures.

The project is supported by the Research Fund for Coal and Steel - RFCS.

Participants of the workshop will receive all presentations as a handout.

PROGRAM

08:30 - Registration

09:00 - 09:30 Concept of Robustness

Dr.-Ing. Jean-François Demonceau (University of Liège)

09:30 – 10:00 Concept of Impact Design

Prof. Dr.-Ing. Benno Hoffmeister (RWTH Aachen)

10:00 – 10:20 Overview on the Project RobustImpact

Prof. Dr.-Ing. Ulrike Kuhlmann (University of Stuttgart)

10:20 – 10:50 Test campaign

Prof. Dr.-Ing. Riccardo Zandonini (University of Trento)

10:50 – 11:20 Coffee Break

11:20 – 11:50 Numerical Approach

Prof. Dr.-Ing. Jonas Korndörfer (RWTH Aachen)

11:50 – 12:10 Column Design

Dipl.-Ing. Carles Colomer (RWTH Aachen)

12:10 – 12:30 Joint Design

Dipl.-Ing. Nadine Hoffmann (University of Stuttgart)

12:30 – 12:50 System Design

Dr.-Ing. Jean-François Demonceau (University of Liège)

12:50 – 13:00 Conclusions & Discussion

Prof. Dr.-Ing. Ulrike Kuhlmann (University of Stuttgart)

13:00 – Lunch

REGISTRATION

SURNAME _____

FIRST NAME _____

COMPANY _____

POSITION _____

ADDRESS _____

CITY _____

ZIP CODE _____

EMAIL ADDRESS _____

TELEPHONE _____

TELEFAX _____

The participation is free of charge.

Registration is requested up to 29.05.2015.

Contact

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