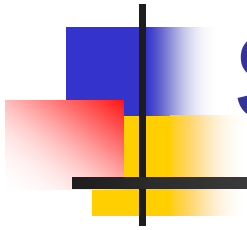

State of Art & Future Activities

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Remit of WG1

- Structural Fire Engineering?
- Fire Resistance?
- Fire Safety Engineering?

Fire Resistance

- Insulation: practically predictable if (1) thermal properties of materials are available; (2) no coupling with load bearing/integrity.
- Load bearing: focus of virtually all presentations.
- Integrity: very little information generally. Is it predictable?

Predicting Structural Temperatures

- Thermal properties of insulation materials under different heating conditions (e.g. parametric fires)
- Durability of fire protection materials
- Stability of fire protection materials

Structural Fire Responses

- Structural materials: steel, concrete, timber, masonry, aluminium, composite
- Structural components: beams, columns, slabs, connections
- Whole structures
- Combination of hazards
- Risk assessment

Future Activities

- COST C26 WG1 comprehensive state of art report on fire resistance
- Identification of generic research topics addressing bottle neck issues for application of EU/National research funding
- Education & practical applications

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Welcome to Poster Session

Poster Session

- Connection modelling in fire Burgess I., *United Kingdom*
- Fire analysis on steel portal frames damaged after earthquake according to performance based design, Faggiano B., Esposto M., Mazzolani F.M., & Landolfo R., *Italy*
- Precious and cossfire: two RFCS projects on joints subjected to fire, Franssen J.M. & Hanus F., *Belgium*
- Behaviour of a cast in-situ concrete structure during a compartment fire, Gillie M. & Stratford T., *United Kingdom*
- Non-linear modelling of reinforced concrete beams subjected to fire, Gribniak V., Bacinskas D., & Kaklauskas G., *Lithuania*
- Numerical analysis of beam to column connection at elevated temperatures, Kwasniewski L., *Poland*
- Stainless steel structural elements in case of fire, Lopes N., Vila Real P.M.M., Simões da Silva L., *Portugal* & Franssen J.-M., *Belgium*
- Some remarks on the simplified design methods for steel and concrete composite beams, Nigro E. & Cefarelli G., *Italy*
- Fire design of composite steel-concrete columns under natural fire, Pintea D. & Zaharia R., *Romania*
- Variations of forces in a real steel structure tested in fires, Sokol Z. & Wald F., *Czech Republic*
- Class 4 stainless steel box columns in fire, Uppfeldt B. & Veljkovic M., *Sweden*
- Analytical model for the web post buckling in cellular beams under fire, Vassart O., *Luxemburg*, Bouchaïr H. & Muzeau J.-P., *France*
- Temperature of the header plate connection subject to a natural fire, Wald F., Chlouba J. & Kallerová P., *Czech Republic*
- Temperatures in unprotected steel connections in fire, Wang Y., Ding J., Dai X.H. & Bailey C.G., *United Kingdom*
- **New generation of concrete reinforcement**, Sitkiewicz Z., *Poland*

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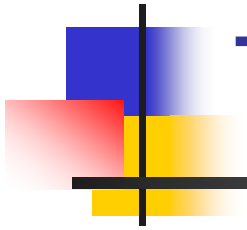

Thank you for your Attention

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