TG1.4 List of Output from 2017-2024

Publications:

- Alfred Strauss, Ana Mandić Ivanković, Vladimir Benko, José Matos, Dr Pierre Marchand, Roman Wan-Wendner, Neryvaldo Galvão, Dr André Orcesi, Jakub Dobrý, Dr Mohammad El Hajj Diab, Krešimir Ninčević , Michael Hauser , Mladen Srbić & Dr Dominik Skokandić (2021) Round-Robin Modelling of the Load-bearing Capacity of Slender Columns by Using Classical and Advanced Non-linear Numerical and Analytical Prediction Tools, Structural Engineering International, 31:1, 118-135, DOI: 10.1080/10168664.2020.1740069
- Strauss, A.; Hauser, M.; Täubling, B.; Ivanković, A.M.; Skokandić, D.; Matos, J.; Galvão, N.; Benko, V.; Dobrý, J.; Wan-Wendner, R.; et al. Probabilistic and Semi-Probabilistic Analysis of Slender Columns Frequently Used in Structural Engineering. Appl. Sci. 2021, 11, 8009. https://doi.org/10.3390/app11178009
- Strauss, A. et al. International safety formats of slender column systems. Appl. Sci. 2024, under review
- Strauss, A; Bergmeister, K; Seywald, C. 2023.: Increase of service life of infrastructures based on semi-probabilistic considerations. BETON- STAHLBETONBAU. 2023; 118(8): 575-588.
- Novák, D.; Strauss, A.; Novák, L:; Lehký, D.; Šomodíková, M.; Lipowczan, M.; Slowik, O.; Doležel, J.; Pukl, R.; Sattler, F.; Apostolidi, E. (2023): Nonlinear probabilistic structural assessment: Findings from Austrian and Czech bridges. ce/papers, Volume 6, Issue 5, 3101-3108; ISSN 2509-7075.
- Strauss, A.; Beigel, A.; Sattler, F.; Täubling-Fruleux, B.; Seywald, C.; Neuner, H.; Kostjak, V.; Frangopol, D.M. (2023): Digital twins and sensor monitoring for alpine engineering structures: Applications for tunnels. [Life-Cycle of Structures and Infrastructure Systems , Milano, Italy , 02.07.2023 - 06.07.2023] In: CRC Press, Life-Cycle of Structures and Infrastructure Systems; ISBN: 978100332302. published
- Strauss, A.; Täubling-Fruleux, B.; Novák, D.; Novák, L.; Frangopol, D.M. (2024): Advanced non-linear probabilistic modelling methods for the existing 100 m high columns of the Jauntal railway bridge.[11th International Conference on Bridge Maintenance, Safety and Management IABMAS 2024, Copenhagen, Denmark, 2024], In: CRC Press. submitted

Research project:

- ATCZ190 Advanced analysis of existing reinforced and pre-stressed concrete bridges: Nonlinearity, reliability, safety formats, life-time aspects: https://2014-2020.at-cz.eu/at/ibox/pa-1-starkung-von-forschung-technologischer-entwicklung-und-innovation/atcz190_safebridge

Special session

- *Ghent 2025 IABSE Congress:* Special Session "Reliability and safety formats in daily engineering practice"

Structural Engineering Document (SED):

Development of the content and structure from the ATCZ190 project and drafting of a national application document - implementation and finalisation will take place in the first part of second period 2024 – 2027