

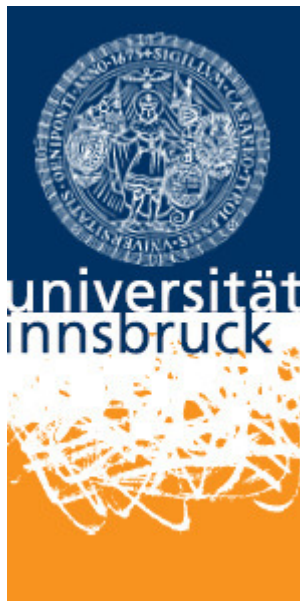


Multi Non-Linear Structural Condition Modeling and Assessment

Our entire infrastructure is aging. Assessment on its function is most important for their management. The traditional approach, namely visual inspections and subjective assessment, has not changed for a long time. On the other hand new knowledge from European research projects became available to VCE. This offers the opportunity to create an entirely new approach to modelling simulation and assessment of our infrastructure using sophisticated mathematical solutions and simulation routines.

Since the collapse of the Reichsbrücke in Vienna on 1st of August 1976 Central Europe has been leading world wide in bridge assessment. VCE has a large share in this field and is acknowledged as one of the world leaders in dynamic structural health monitoring. After the collapse of the Mississippi Bridge on 1st of August 2007 it became obvious that it is high time for a next generation of high-tech computer based systems to support the managers of our infrastructure which are confronted with shrinking budgets.

MIMOSA is determined to develop the necessary models to allow online updating of the multi non linear behaviour of our infrastructure. The product will be a **Modelling and Simulation Tool Box** able to provide the managers of the infrastructure with all necessary information to carry out their job and to optimize the economic side of this exercise.



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http://www.u-tokyo.ac.jp/index_e.html