Dr.- Ing. Bernhard Lechner

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Expertise:

Track design and performance analysis (ballasted and ballastless); Real and virtual testing; Vehicle-Track-Substructure interaction, Track stiffness; Noise and vibration

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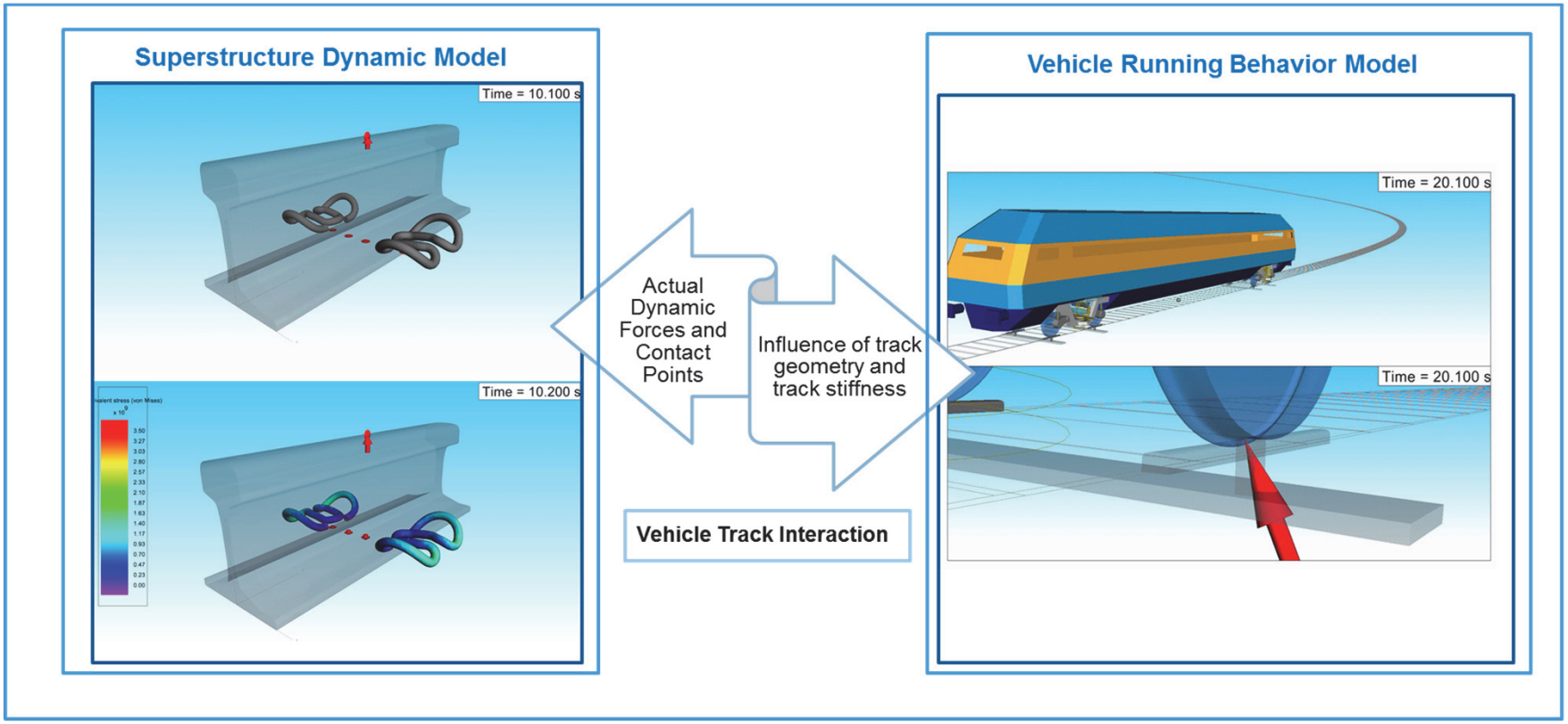
S2R-0C-IP3-01-2020: Next Generation Track Transition Zones

Track stiffness transition design using hybrid testing strategies (Virtual and lab/in-situ testing; Enhanced track structure monitoring based on train borne or/and track borne data)

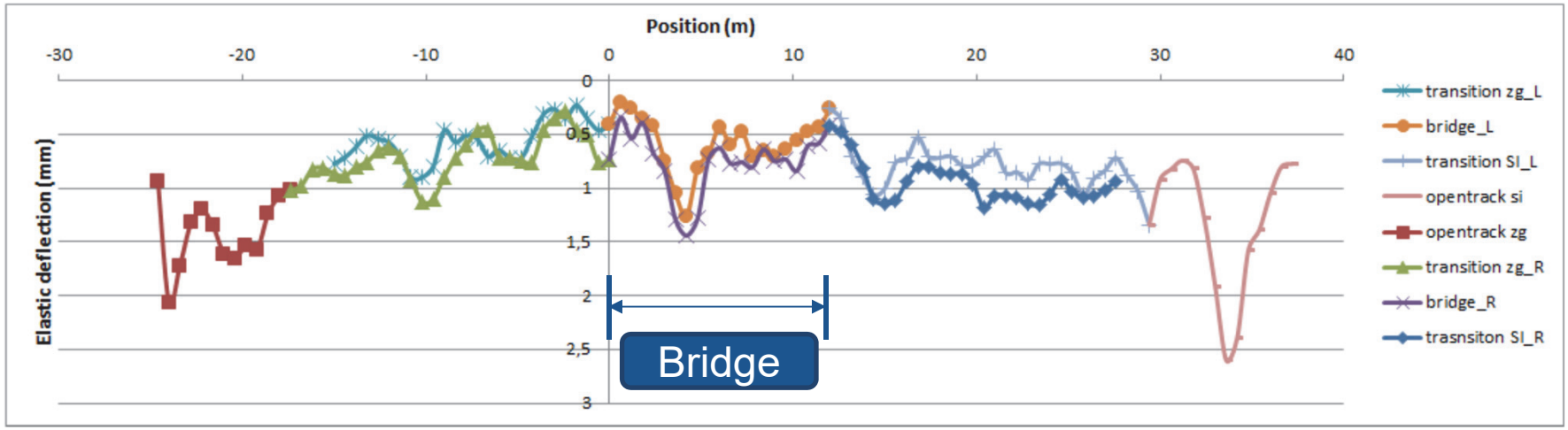
Partners:

- **Infrastructure managers (integration of track structure monitoring; train borne vs. track borne)**
- **Tracksystem, subsystem and components suppliers**

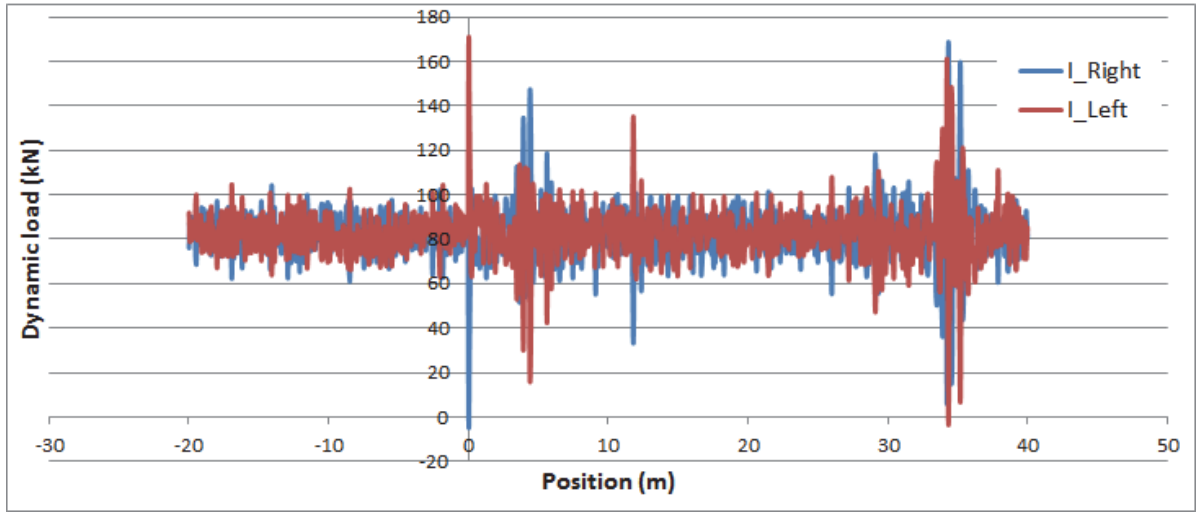
Analysis and evaluation of local track geometry and stiffness discontinuities (e.g. Transitions)



Track stiffness variation along discontinuities, Case study Bridge - Transitions



Dynamic wheel load simulation(MBS)



References

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