ORAL PRESENTATION in ICCAIRO CONFERENCE

Link: https://www.youtube.com/watch?v=rKSIRkEGe6Y&t=643s

Subject: Control of the Geometry of a Railway Track: Measurements of Defects and Theoretical Simulation.

Abstract: The Railway track, is simulated as a beam on elastic foundation with damping. The motion of a vehicle is simulated by the 2nd order differential equation of motion; the input to the system “vehicle-rail” is the form of the Track Geometry which “acts” as a “signal”. The defects with short and long wavelength influence the value of the dynamic component of the acting loads on the railway track and they are recorded in the frame of the Quality Control of the Railway Track. A sensitivity analysis is performed for both cases of defects.