Track-bridge interaction problems have a main role in the design of bridges, especially at conception stage of long viaducts with high or short piers in high speed railways lines.

The presentation will focus on the main aspects of track bridge interaction aspects to be taken into account in the design of these bridges:

- Bridge displacement limitations at track level
- Railway expansion joint needs

Some examples of recent bridges which have been designed in High speed railway lines in Spain will be shown. A special attention will be paid to the Viaduct over the Guadalete river. It is a 3221.70 m long viaduct in which the aforementioned problems were determinant in the conception and design of the bridge.