A knowledge-based prognostics framework for railway track geometry degradation

Juan Chiachío, Manuel Chiachío, Darren Prescott, John Andrews

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Highlights

- Physics-based models and data are fused for railway track degradation forecasting;
- A filtering-based prognostics methodology is adopted to deal with uncertainties;
- A case study is presented using published data from Nottingham Railway Test Facility;
- A new prognostics metric is proposed to compare the performance of different models;
- Discussion is provided about extension to infrastructure asset management;