

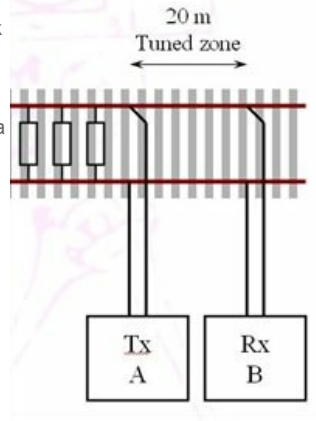
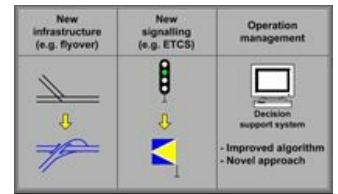
Signaling and Train Controls

Academic staff

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The research work within signalling and train control includes both condition monitoring of signalling assets and the application of advanced algorithms for train movement control. This includes automatic route setting and dynamic rescheduling following disturbance.

Railways operating near their theoretical capacity, which is routinely true of metros and increasingly so of substantial parts of the UK mainline network, are particularly vulnerable to disruption by human behaviour or engineering failures that lead to delays to or even cancellation of services. These problems may, and, in the UK, undoubtedly should, be addressed by increasing network capacity and improving operating reliability. However, these are long-term goals, and require enormous investment. In the short term (and generally), it is clearly advantageous to respond to disruptive incidents in such a way as to minimise the resulting problems.



Current projects:

- Testing of audio frequency track circuits.
- PhD student: Collaborative rescheduling for a railway network.
- PhD student: Train regulation at complex junctions for optimum traction energy consumption.