

# **Diagnostics for Electric Drives**

# Developing techniques to diagnose failures in electric drives and conducting research to prognose faults.

## Competitive advantage

- Innovative techniques to diagnose faults in drive systems and to self-heal
- Experimentally verified control techniques and code for fault identification and recovery
- Expertise in improving the economics of renewable generation, especially wind power
- Experience in the drive and control of multi-phase machines

#### **Impact**

- Electric drives currently use 60 to 65 per cent of all electrical energy generated across the globe. Many of them require, or would benefit from, some form of diagnostics to identify faults and imminent failure
- Diagnostic techniques lead to reductions in unplanned maintenance and maintenance costs, and shorter outage times

#### Successful applications

• Self-healing techniques have been demonstrated for electrical drives

## Capabilities and facilities

• Electrical machine design for performance improvements under faulted operation

#### Our partners

Motorica

#### More Information

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