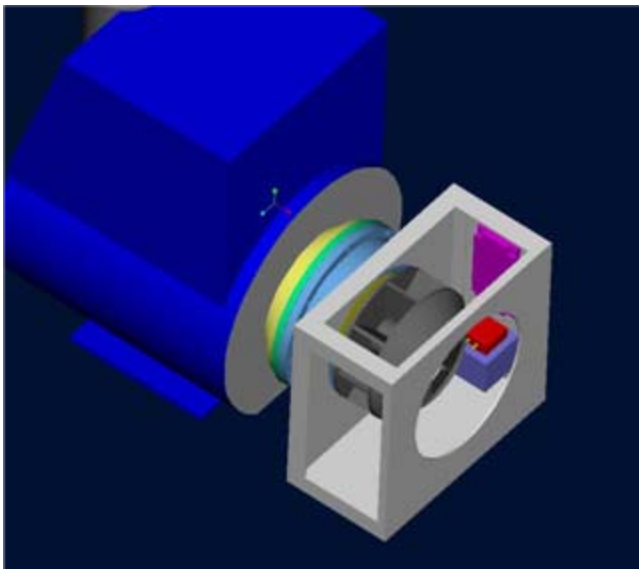
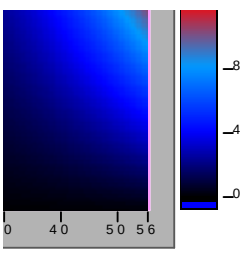
ESTD
Engineering Science & Technology Division

Hybrid Electric Vehicle Motor Modeling

Goal
Develop a physics-based dynamic computer model for designing and evaluating electric machines for hybrid electric vehicles.



Approach
Develop a user-interactive graphics-based executable that is application independent.



Model Features

- Control module for time response of motor to variations in load and motor inertia.
- Road test module for study of time response of motor to variations in speed, load, and ambient temperature.
- Performance map module.
- Design module for parametric studies and optimization
- Drawing module for stator/rotor visualization and construction.

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