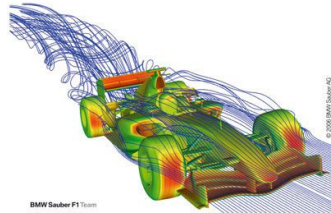


Uncertainty quantification and risk analysis APM_52068_EP

How to manage uncertainties in numerical models and simulations (in physics, engineering, epidemiology, etc.) ?



- ▶ **Sources of uncertainty:** physical parameters, environmental conditions, manufacturing and measurement errors, and model errors.
- ▶ **Uncertainty quantification:** quantifying confidence in predictions and decisions derived from models and simulations.
- ▶ Course objective: to introduce mathematical methods for modeling, characterizing, and analyzing uncertainties.
↳ **Probabilistic modeling.**
- ▶ Course material in English; evaluation: exam and project.