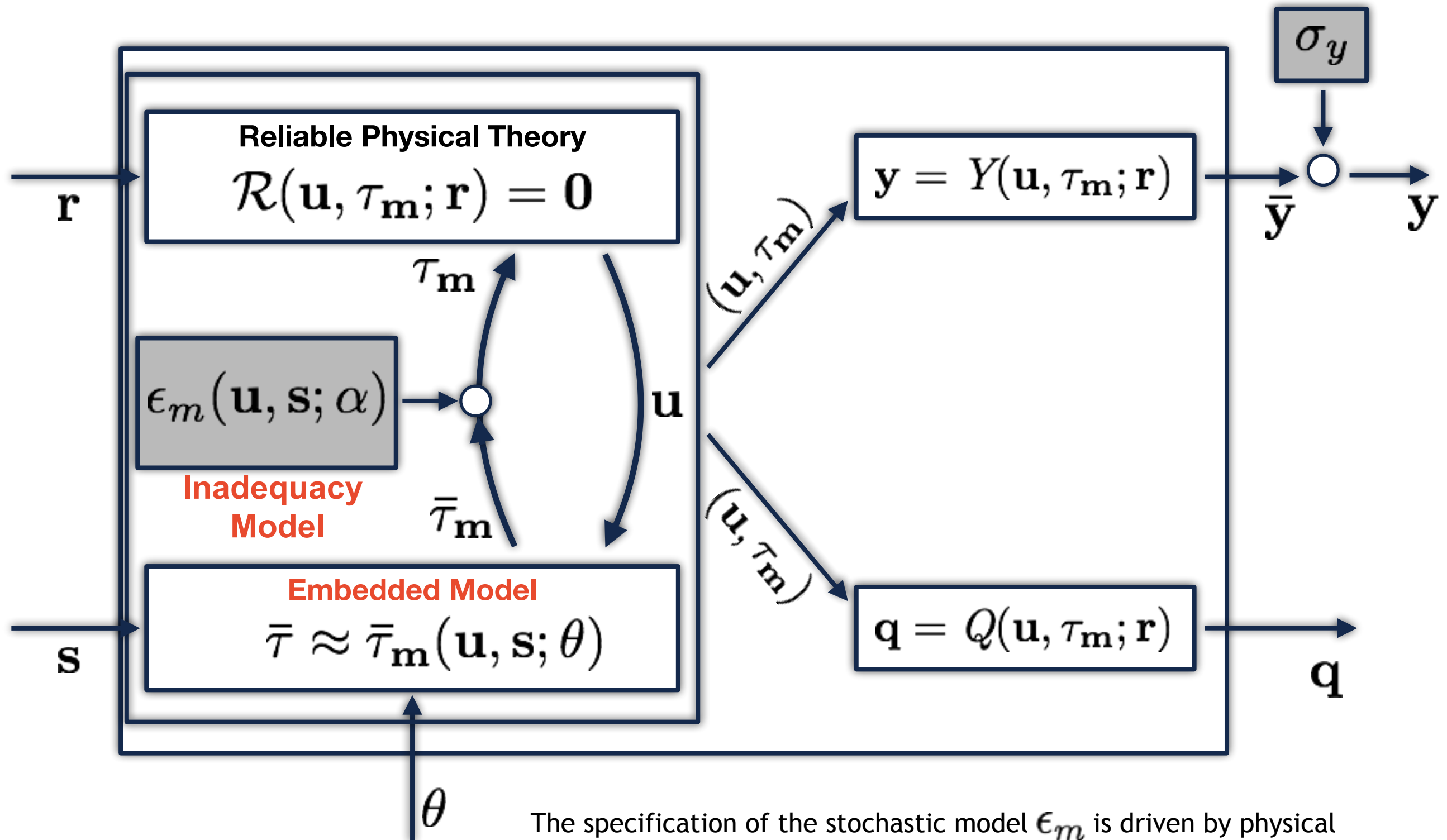# The Predictive Validation Process

Alternatively, we can move the non-deterministic model **upstream to the embedded component,** which is the main source of uncertainty (generally).

The specification of the stochastic model ϵ_m is driven by physical knowledge about the nature of the error, and it is **problem-dependent**.

The 3-Steps Reliability Assessment

(Or Predictive Estimation): The probabilistic quantification of predicted experimental and computational outcomes with identified and quantified uncertainties.
It is comprised of 3 components:

- **Model Calibration** (or **Inverse Problem**)

- **Validation (or Model Prediction)**

- **Predictive Assessment (or Estimation of the Validation Regime)**