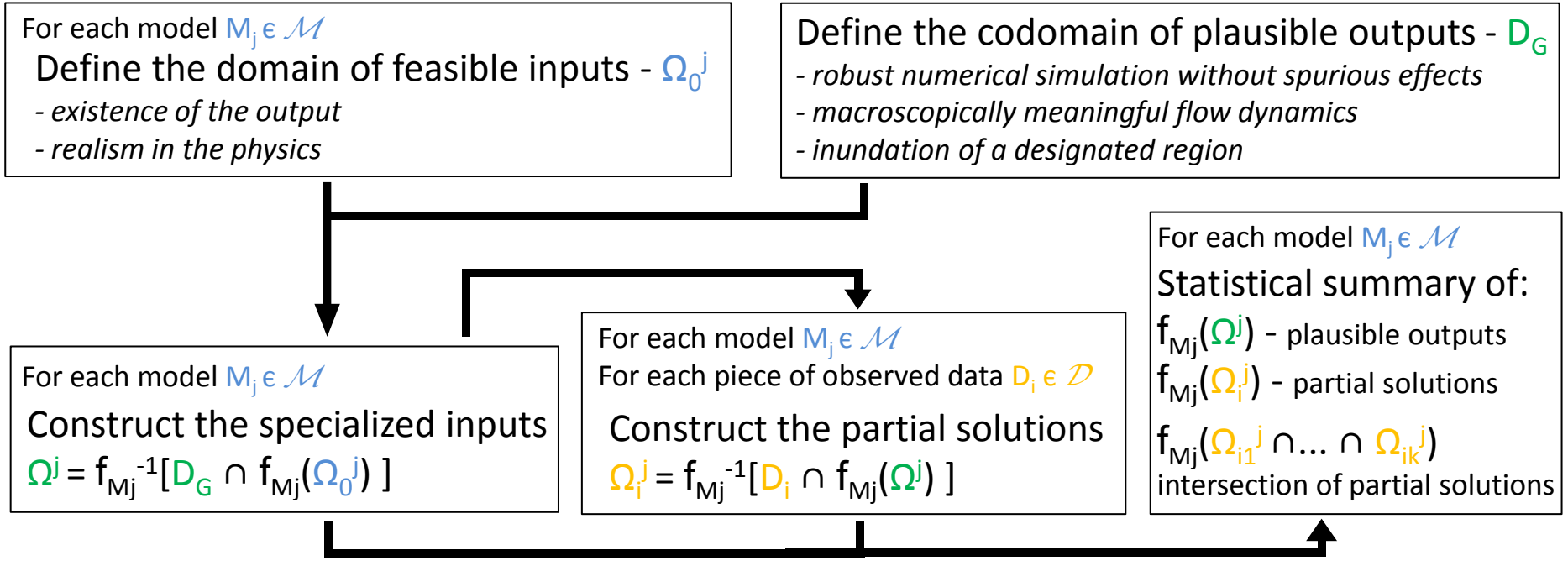
For each model $M_j \in \mathcal{M}$
Define the domain of feasible inputs - Ω_0^j
- existence of the output
- realism in the physics
Define the codomain of plausible outputs - D_G
- robust numerical simulation without spurious effects
- macroscopically meaningful flow dynamics
- inundation of a designated region
For each model $M_j \in \mathcal{M}$
Construct the specialized inputs
$\Omega^j = f_{Mj}^{-1}[D_G \cap f_{Mj}(\Omega_0^j)]$
For each model $M_j \in \mathcal{M}$
For each piece of observed data $D_i \in \mathcal{D}$
Construct the partial solutions
$\Omega_i^j = f_{Mj}^{-1}[D_i \cap f_{Mj}(\Omega^j)]$
For each model $M_j \in \mathcal{M}$
Statistical summary of:
$f_{Mj}(\Omega^j)$ - plausible outputs
$f_{Mj}(\Omega_i^j)$ - partial solutions
$f_{Mj}(\Omega_{i1}^j \cap \ldots \cap \Omega_{ik}^j)$
intersection of partial solutions