



**University  
of Basel**

In association with:



**What are economic models?**

**What is a model?**

$$P(Q), \quad Q = \sum_{i=1}^n q_i.$$

$$\max_{e_i \geq 0} B_i(e_i) - t e_i.$$

$$\max_{q_i, a_i \geq 0} P q_i - c(q_i, a_i) - t e_i,$$

$$e_i = s_i(q_i, a_i).$$

$$P = \frac{\partial c_i(q_i, a_i)}{\partial q_i} + t \frac{\partial s_i(q_i, a_i)}{\partial q_i},$$

$$0 = \frac{\partial c_i(q_i, a_i)}{\partial a_i} + t \frac{\partial s_i(q_i, a_i)}{\partial a_i}.$$

$$W = \int_0^{Q = \sum_{i=1}^n q_i} P(\tilde{q}) d\tilde{q} - \sum_{i=1}^n c_i(q_i, a_i) - D \left( \sum_{i=1}^n s_i(q_i, a_i) \right).$$

$$P q_i - c_i(q_i, a_i) - t s_i(q_i, a_i).$$

"A model [...] is a story  
with a specified structure"  
(Varian, 1978)



"Credible worlds"  
(Sugden, 2000)



A model should be

- **Fit for purpose**
- **Internally consistent**
- **Credible and robust**