## Long-Term Productivity: Science, not Preference **Spencer Smith** and Jacques Carette

- Spencer Smith
  - Computing and Software, McMaster, Canada
  - Computational Mechanics and Software Engineering
- Evidence based decision making to improve quality
- Long-term perspective (manage technical debt)
- Not just code (process, tools, environment, artifacts)
- What artifacts?
  - Improve productivity measure
    - P = O/I
    - $I = \int_0^T H(t) dt$
    - $\triangleright$   $O = \int_0^T \sum_{c \in C} F(S_c(t), K_c(t)) dt$
  - Support assurance case
- Sync problem with artifacts? Generate all things