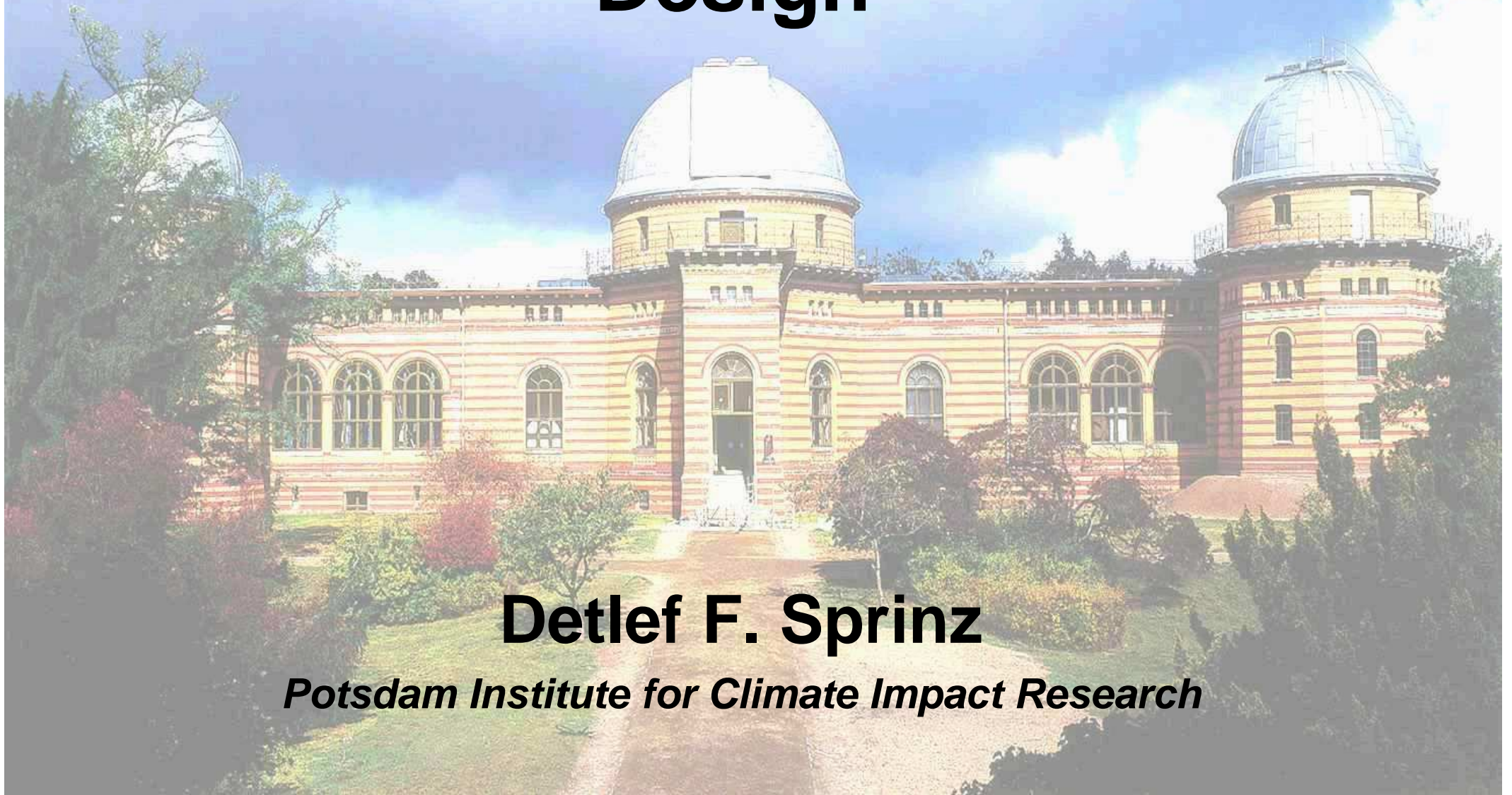


# **“Long-Term Policy Challenges: Definition & Institutional Design”**



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# Overview

- Definition
- Three Challenges & Institutional Design Options
  - time consistency
  - domestic politics
  - international anarchy
- Conclusions

# Long-Term Policy Problems

- Definition
  - duration of problem: one generation (25 years) +
    - intervention for desired outcome takes substantial time
    - negative effects persist for one generation+ if driving forces remain unchanged
  - uncertainty induced specifically by aspects of deep time
    - structural uncertainty
  - public goods aspect
    - problem generation as well as remedy

# Three Challenges

- Time Consistency
  - “[T]here is no mechanism to induce *future* policymakers to take into consideration the effect of their policy ... upon *current* decisions of agents” (Kydland & Prescott 1977).
- Domestic Politics
- International Anarchy

# Time Consistency

- Challenge
  - trap of postponement *when, e.g.*, to take substantive mitigation measures
  - hindsight: regret to not have taken credible steps earlier
- Remedies
  - rational ignorance (not constantly update)

# Time Consistency

- Remedies (cont.)
  - follow rules rather than discretion = tying hands
    - emergency clause
    - pre-commitment
      - 2°C temperature change as compared to pre-industrial levels
      - EU renewable energy target (2010 goal will be missed)
      - EU 2020 emission reduction targets
        - » un/conditional
  - informational problems
    - e.g., first-mover rents in technology sector (e.g., wind)
  - liability for unavoided damages
    - liability & adaptation fund

# Domestic Politics

- Challenges
  - time preference: now vs. future (discounting)
  - asymmetric knowledge about cost vs. benefits
  - asymmetry in human choice: avoid large losses vs. prospects for similar magnitude of gains
  - concentrated costs & dispersed benefits

# Domestic Politics

- Remedies
  - constitutions
  - costly investments (path dependencies)
  - reversibility of decisions: blocking vs. enabling majorities
  - transparency (information)



# International Anarchy

- Challenge
  - depth & stability of international cooperation
  - free rider incentives: contemporaneous and over time
  - negotiating agreements
    - depth of obligations vs. strength of enforcement
    - factoring in penalties
- Ideal Goal
  - ambitious agreements without enforcement problems

# International Anarchy

- Remedies
  - decentralized enforcement (WTO)
  - multiple *regional* (homogenous) rather than universal agreements (J. Hovi)
  - technology agreements & network externalities
    - circuit breaker agreements bind once minimum coalition size has been reached → collective switching

# Conclusions

- Three Challenges
  - time consistency
  - domestic politics
  - international anarchy
- Plethora of Research Challenges –  
*Your Opportunity to Make a Difference!*

# Additional Information

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- Documents & Publications

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