

Not Even Wrong:

**Using the Empirical Implications of
Theoretical Models (EITM) to
Minimize Non-falsifiable Research
Practices**

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"But, surely, Pauli, you don't think what I've said is completely wrong? No, I think what you said is not even wrong."

A discussion between Wolfgang Pauli and a fellow physicist (name unknown).

Presentation Outline

I. Module 1: An Overview

1. Current Research Practices and Scientific Cumulation

2. EITM can help Arrest this Problem

3. Current Practices that Contribute to Research that is Not Even Wrong

- Data Mining
- Garbage-Cans
- Omega Matrices

4. Using EITM as a Way to Minimize Non-Falsifiable Research Practices

- Merge Three Applied Statistical Concepts with Three Applied Social, Behavioral, and Economic Concepts
 - Applied Statistical Concepts: Persistence, Measurement Error, and Simultaneity
 - Applied Social, Behavioral, and Economic Concepts: Expectations, Learning, and Social Interaction

5. An Example: Aggressive Inflation Stabilizing Policy and Price Level Indeterminacy

II. Module 2: Empirical and Theoretical Concepts

1. Applied Statistical Concepts

- Persistence
- Measurement Error
- Simultaneity

2. Social, Behavioral, and Economic Concepts

- Expectations
- Learning
- Social Interaction

III. Module 3: Empirical and Theoretical Techniques

1. Applied Statistical Techniques

- Autocorrelation Corrections
(persistence)
- Error-in-Variables Regression
(measurement error)
- Two-Stage Least Squares
(simultaneity)

2. Social, Behavioral, and Economic Modeling Techniques

- Conditional Expectations
 - Linear Least Squares Projections
 - Law of Iterated Projections

- Method of Undetermined Coefficients
- Minimum State Variable Solution (MSV)
- Adaptive Learning
 - Rational Expectations Equilibrium
 - Perceived Law of Motion (PLM)
 - Actual Law of Motion (ALM)
 - Stability Conditions
- Example

IV. Module 4: EITM and Persistence

1. The Role of Expectations and Learning

- Example 1: Persistence in Party Identification (“Macropartisanship”)
- Example 2: Aggressive Inflation Stabilization Policy and Inflation Persistence

V. Module 5: EITM and Measurement Error

1. The Role of Expectations and Uncertainty

- Example: Signal Extraction and the Lucas Supply Curve

VI. Module 6: EITM and Simultaneity

1. The Role of Expectations, Learning, and Social Interaction

- Example: The Boomerang Effect