

Engineering rigor and its discontents: Philosophical reflection as curative to math- physics envy.

Goldberg, David E. (2009) Engineering rigor and its discontents: Philosophical reflection as curative to math-physics envy..

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Abstract

This extended abstract critically exams the use of the terms "rigorous" and "soft" in the context of engineering modeling. Common usage of the terms is contrasted with Toulmin's notion of "reasonableness" and Schoen's notion of "reflective practice." The abstract continues by considering an economic model of models in engineering, suggesting that overly "rigorous" engineering practice may box itself into being unable to afford the models it values, thereby presenting a conundrum for the practice and teaching engineering that demands relaxation.

Keywords: philosophy-of-engineering Toulmin Schoen rigor reasonableness reflective-practice

Subjects: [General Issues: Models and Idealization](#)

ID Code: 4489

Deposited By: [Goldberg, David E.](#)

Deposited On: 05 March 2009

Additional Information: Abstract submitted to SPT 2009