Guide

Quantum Interactive Learning Tutorials (QuILTs)

Indicates a research-demonstrated benefit

Overview

Guided-inquiry worksheets for upper-level quantum mechanics. Connect quantitative formalism to qualitative understanding and build physical intuition.

Type of Method	Curriculum supplement, Tutorials
Level	**Designed for:** Upper-level Undergraduate **Can be adapted for:** Graduate School , Intermediate
Setting	**Designed for:** Lecture - Small (<30 students) , Recitation/Discussion Session **Can be adapted for:** Lecture - Large (30+ students), Homework, Studio
Coverage	Few topics with great depth
Topics	Modern / Quantum
Instructor Effort	Medium
Skills	**Designed for:** Conceptual understanding , Making real-world connections, Using multiple representations, Metacognition
Research Validation	**Based on research into:** theories of how students learn , student ideas about specific topics **Demonstrated to improve:** conceptual understanding **Studied using:** student interviews , classroom observations , research at multiple institutions
Compatible Methods	Peer Instruction, PhET, JiTT, CGPS, Physlets, SCALE-UP, OSP, LA Program, CAE TPS, New Model Course, TEFA, CU Modern, CU QM, Paradigms, PI QM, Tutorials, Clickers
Similar Methods	UW Tutorials, ABP Tutorials, OST Tutorials, Lecture-Tutorials, CU QM, Thermal Tutorials, Mechanics Tutorials, PI QM, Tutorials
Developer(s)	Chandralekha Singh and PER team at the University of Pittsburgh
Website	http://www.phyast.pitt.edu/~cls/quantum/