



Physlets

 Indicates a research-demonstrated benefit

Overview

Small, flexible, educational physics applets that use simple graphics to convey only salient features of physical phenomena; modifiable and adaptable.






Type of Method

Computer simulations




Level

Designed for: Intro College Calculus-based  , Intro College Algebra-based  , Upper-level Undergraduate  , Intro College Conceptual, Intermediate

Can be adapted for: Teacher Prep Course, High School



Setting

Designed for: Lecture - Small (<30 students)  , Lab, Homework, Studio

Can be adapted for: Lecture - Large (30+ students)



Coverage

Few topics with great depth, Many topics with less depth



Topics

Mechanics, Electricity / Magnetism, Waves / Optics, Thermal / Statistical, Modern / Quantum



Instructor Effort

Medium





Resource Needs

Projector, Computers for students





Skills


Designed for: Conceptual understanding  , Problem-solving skills  , Using multiple representations

Can be adapted for: Lab skills, Designing experiments



Research Validation

Based on research into: theories of how students learn  , student ideas about specific topics 

Demonstrated to improve: conceptual understanding 



Compatible Methods

[Peer Instruction](#), [PhET](#), [UW Tutorials](#), [JiTT](#), [Ranking Tasks](#), [ILDs](#), [CGPS](#), [Context-Rich Problems](#), [RealTime Physics](#), [Workshop Physics](#), [TIPERs](#), [ABP Tutorials](#), [SCALE-UP](#), [Modeling](#), [OSP](#), [SDI Labs](#), [OST Tutorials](#), [ISLE](#), [Thinking Problems](#), [Workbook for Introductory Physics](#), [LA Program](#), [PET](#), [PSET](#), [LEPS](#), [CAE TPS](#), [Lecture-Tutorials](#), [Astro Ranking Tasks](#), [MBL](#), [New Model Course](#), [CPU](#), [SCL](#), [TEFA](#), [CU Modern](#), [CU E&M](#), [CU QM](#), [QuILTs](#), [IQP](#), [Thermal Tutorials](#), [Mechanics](#)

[Tutorials](#), [Energy Project](#), [SGSI](#), [Paradigms](#), [PUM](#), [EiP](#), [Tools for Scientific Thinking](#), [PI QM](#), [M&I](#), [Tutorials](#), [Clickers](#), [MOP](#), [Responsive Teaching](#)



**Similar
Methods**

[PhET](#), [OSP](#), [CPU](#)



Developer(s)

Wolfgang Christian



Website

<https://www.compadre.org/physlets>