

<<大学物理引论>>

图书基本信息

书名：<<大学物理引论>>

13位ISBN编号：9787810899963

10位ISBN编号：7810899961

出版时间：2006-12

出版时间：东南大学出版社

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页数：334

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## 前言

恽瑛教授领导的课题组在物理教学方面从事研究工作已有近20年的历史。数年前，他们在多年教学研究实践的基础上创设了“双语物理导论”这一多学科集成的课程，以使大学低年级学生尽早具备阅读英文教材、物理文献的能力，培养学生能够早日具有参加课题研究的能力。

这是一项非常有意义的工作。

该课题组在开展此项教学研究工作中，精心制作了《大学物理多媒体光盘》（英文版），并多次修改完善，在多年的教学实践中收到了很好的教学效果。

同时，此套教学用光盘也得到了不少国内外知名物理学家的赞许。

最近，该课题组又正式推出了“双语物理导论”课程的依托教材——《Bilingual Physics with Multimedia》（《大学物理引论（双语多媒体教材）》）。

该教材将动态的视频、音频的光盘，与静态的英文文字教材有机结合起来，是一项新颖而有益的尝试。

此外，该教材还辅以适度的参考译文及英语词汇，这些译文和词汇是编者们根据多年的教学实践而编纂的，相信会对我国的双语教学有所帮助和促进。

在此，我愿向广大的物理教师推荐此教材，并祝各位教师在采用此教材的双语物理教学中取得更多的业绩！

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### 内容概要

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## 章节摘录

插图：Questions for Thinking(1) As shown in Fig. A and B are made of the same material and of the same size. Cylinder A is a whole block while B is the combination of two coaxial cylinders (no friction and space between the two coaxial cylinders). A and B are now released at the top of an inclined plane, and rotate without slipping. Which one will go faster?(2.) Three rods are made of the same material, of the same length and mass, their cross sections are shown in Fig. Which has the largest moment of inertia about an axis passing its center of mass and perpendicular to its cross section? Which has the smallest?Answers(1) Moment of inertia of B < Moment of inertia of A. Cylinder B rotates faster than cylinder A, they are acted on by equal torques.(2) B has the largest moment of inertia, and A has the smallest. CD-ROM 1-8 conservation of Angular Momentum Teaching Objectives(1) Use demonstration apparatus to show vividly the phenomena of and the conditions for the Law of the Conservation of Angular Momentum.

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编辑推荐

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