

ISSN 1870-9095



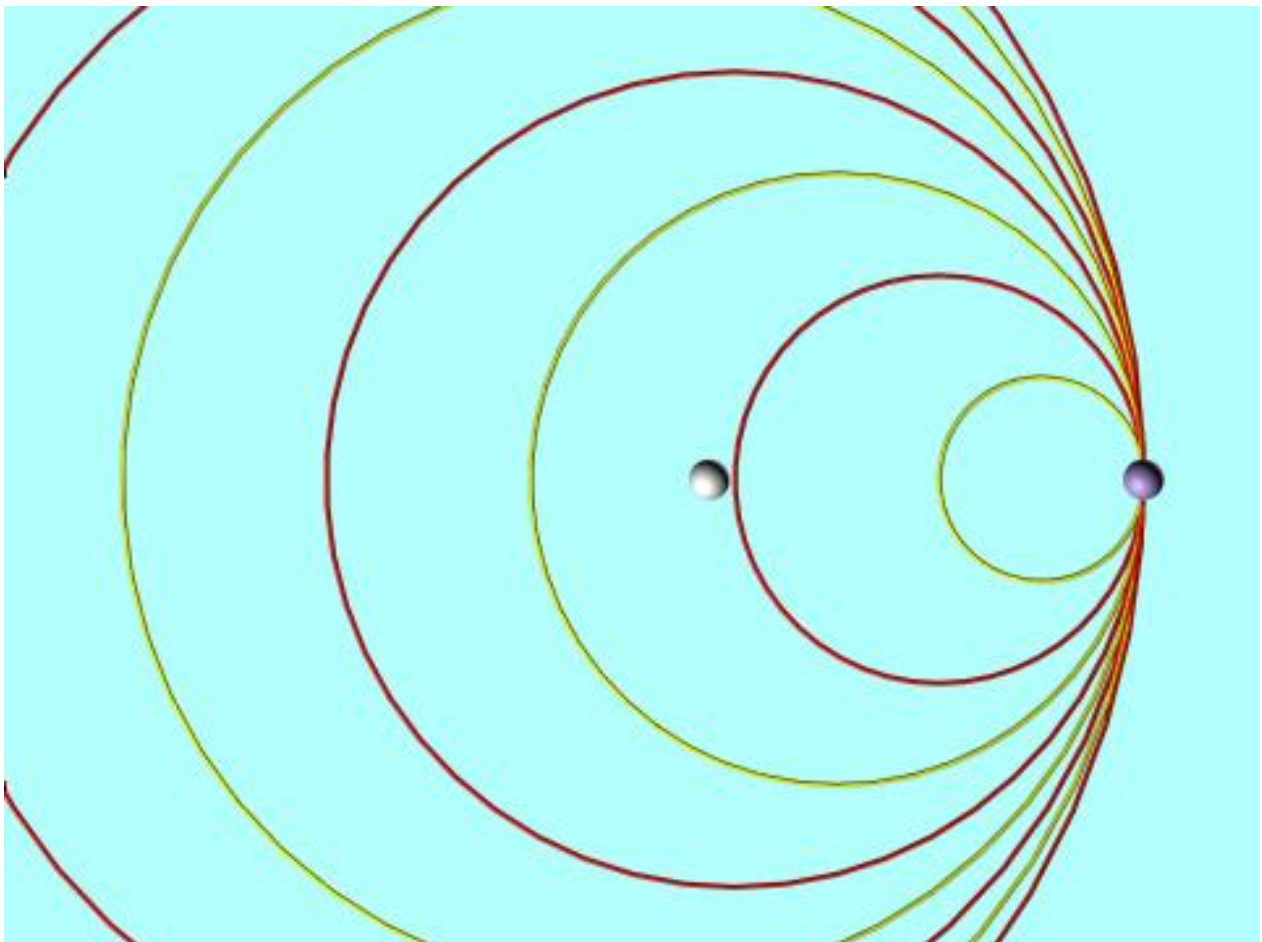
LATIN AMERICAN JOURNAL OF PHYSICS EDUCATION

www.journal.lapen.org.mx

Volume 2

Number 1

January 2008



A publication sponsored by Centro de Investigación en Ciencia Aplicada y Tecnología Avanzada del Instituto Politécnico Nacional and the Latin American Physics Education Network



LATIN AMERICAN JOURNAL OF PHYSICS EDUCATION

Electronic version of this journal can be downloaded free of charge from the web-resource:

<http://www.journal.lapen.org.mx>

Production and technical support

Daniel Sánchez Guzmán
dsanchez@ipn.mx

EDITORIAL POLICY

Latin American Journal of Physics Education is a peer-reviewed, electronic international journal for the publication of papers of instructional and cultural aspects of physics. Articles are chosen to support those involved with physics courses from introductory up to postgraduate levels.

Papers may be comprehensive reviews or reports of original investigations that make a definitive contribution to existing knowledge. The content must not have been published or accepted for publication elsewhere, and papers must not be under consideration by another journal.

This journal is published three times yearly (January, May and September), one volume per year by Centro de Investigación en Ciencia Aplicada y Tecnología Avanzada del Instituto Politécnico Nacional and The Latin American Physics Education Network (LAPEN). Manuscripts should be submitted to cmoral@ipn.mx or lajpe@lapen.org.mx. Further information is provided in the "Instructions to Authors" on www.journal.lapen.org.mx

Direct inquiries on editorial policy and the review process to: Cesar Mora, Editor in Chief, CICATA-IPN Av. Legaria 694, Col Irrigación, Del. Miguel Hidalgo, CP 11500 México D. F.

Copyright © 2007 César Eduardo Mora Ley, *Latin American Physics Education Network*. (www.lapen.org.mx)

ISSN 1870-9095

EDITOR-IN-CHIEF

Cesar Mora, Instituto Politécnico Nacional, México.

INTERNATIONAL ADVISORY COMMITTEE

Carl Wenning, Illinois State University (USA)
Diane Grayson, Andromeda Science Education (South Africa)
David Sokoloff, University of Oregon (USA)
Edward Redish, University of Maryland (USA)
Elena Sassi, University of Naples (Italy)
Freidrich Herrmann, University of Karlsruhe (Germany)
Gordon Aubrecht II, Ohio State University (USA)
Hiroshi Kawakatsu, Kagawa University (Japan)
Jorge Barojas Weber, Universidad Nacional Autónoma de México (México)
José Zamarro, University of Murcia (Spain)
Laurence Viennot, Université Paris 7 (France)
Marisa Micheli, University of Udine (Italy)
Marco Antonio Moreira, Universidade Federal do Rio Grande do Sul (Brazil)
Minella Alarcón, UNESCO (France)
Pratibha Jolly, University of Delhi (India)
Priscilla Laws, Dickinson College (USA)
Ton Ellermeijer, AMSTEL Institute University of Amsterdam (Netherlands)
Verónica Tricio, University of Burgos (Spain)
Vivien Talisayon, University of the Philippines (Philippines)
Zdenek Kluber, Technical University (Czech Republic)

EDITORIAL BOARD

Amadeo Sosa, Ministerio de Educación y Cultura Montevideo (Uruguay)
Carola Graziosi, APFA (Argentina)
Deise Miranda, Universidade Federal do Rio de Janeiro (Brasil)
Eduardo Moltó, Instituto Superior Pedagógico José Varona (Cuba)
Eduardo Montero, Escuela Superior Politécnica del Litoral (Ecuador)
Josefina Barrera, Universidade do Estado do Amazonas (Brasil)
Josip Slisko, Benemérita Universidad Autónoma de Puebla (México)
Juan Evertsz, Universidad Pontificia Católica Maestra y Maestra, Sociedad Dominicana de Física (Rep. Dominicana)
Julio Benegas, Universidad Nacional de San Luis (Argentina)
Leda Roldán, Universidad de Costa Rica (Costa Rica)
Manuel Reyes, Universidad Pedagógica Experimental Libertador (Venezuela)
Mauricio Pietrocola Universidad de Sao Paulo (Brasil)
Nelson Arias Ávila, Universidad Distrital, Bogotá (Colombia)
Octavio Calzadilla, Universidad de la Habana (Cuba)
Ricardo Buzzo Garrao, Pontificia Universidad Católica de Valparaíso (Chile)