Lectures

March 1964: *On the stability of the Lurie equations*, Case-Western Reserve University, Cleveland, OH.

December 1965: *On the existence of solutions to linear differential-difference equations*, International Symposium on Differential Equations and Dynamical Systems, Mayaguez, Puerto Rico.

September 1966: *The index in 3 and 4 dimensions*, Equadiff II, Bratislava, Czechoslovakia.

July 1968: *Generic bifurcation of periodic points*, Global Analysis Conference, Berkeley, CA.

August 1968: *Bridges of periodic solutions in the restricted three-body problem*, Conference on the Qualitative Theory of Nonlinear Differential and Integral Equations, University of Wisconsin.

June 1969: *Bridges and natural centers*, Symposium on Differential Equations and Dynamical Systems, University of Warwick, Coventry, England.

July 1969: *Bifurcations of periodic points*, Seminar in Differential Equations, University of Maryland.

November 1970: *Generic bifurcation of periodic points*, University of Alberta, Alberta, Canada.

February 1971: *Generic bifurcation of periodic points*, Notre Dame University.

May 1971: *Periodic solutions at the triangular points*, British Mathematics Colloquium, University of Kent, Kent, England.

June 1971: *Normal forms for symplectic matrices*, Conference on Ordinary Differential Equations, Washington, DC.

July 1971: *Symmetries and integrals in mechanics*, Symposium on Dynamical Systems, University of Bahia, Salvador, Brazil.

June 1974: *Adiabatic invariants for linear Hamiltonian systems*, Géométrie Symplectique et Physique Mathématique, Aix-en-Provence, France.

July 1974: *Homoclinic points of area preserving maps*, Symposium on Applications of Topology and Dynamical Systems, University of Warwick, Coventry, England.

September 1978: *Entrainment domains*, VIII International Conference on Nonlinear Oscillations, Prague.

December 1979: *Computing the averaged equations*, New Approaches to Nonlinear Problems in Dynamics, Asilomar Conference Grounds, California.

May 1979: *Symmetric periodic solutions in the N-body problem*, Brown University.

June 1979: *Periodic solutions of the N-body problem,* Conference on the Global Theory of Dynamical Systems, Northwestern University.

March 1980: *Periodic solutions in celestial mechanics I & II,* Autonomous University of Barcelona, Barcelona, Spain.

March 1980: *Generic properties of Hamiltonian systems I & II,* University of Barcelona, Barcelona, Spain.

April 1980: *Periodic solutions of the N-body problem*, Mathematics Institute, University of Warwick, Coventry, England.

May 1980: *Computing normal forms,* Mathematics Institute, University of Warwick, Coventry, England.

August 1981: *Hill's lunar equation and the three body problem*, Conference on Celestial Mechanics, Oberwolfach, Germany.

May 1981: *Periodic solutions in the three body problem*, Conference on Dynamical Systems in Honor of J. P. LaSalle, Brown University.

August 1982: *Almost closed geodesics*, NSF Regional Conference on Closed Geodesics, University of Florida.

September 1983: *Brown's method of computing derivatives*, Midwest Dynamical Systems Seminar, University of Minnesota.

May 1983: A *generalization of Arnold's stability theorem,* Institute for Mathematics and its Applications, University of Minnesota.

October 1984: *Normal forms for general equilibria*, Midwest Dynamical Systems Seminar, Northwestern University.

August 1984: *Bifurcation of a central configuration,* Multiparameter Bifurcation T heory, Humboldt State University, California.

December 1984: *Bifurcations of a central configuration,* Canadian Mathematical Society Winter Meeting, Calgary.

January 1985: A *generalization of Arnold's stability theorem,* Special Session on Celestial Mechanics, ASM Meeting, Anaheim, California.

January 1985: *Normal forms for general equilibria,* Special Session on Differential equations, ASM Meeting, Anaheim, California.

October 1985: *Bifurcations of a central configuration,* Midwest Dynamical Systems Seminar, University of Michigan.

November 1985: *Bifurcations of a relative equilibrium,* Boston University.

November 1985: *On Arnold's stability theorem,* MIT.

November 1985: *On Arnold's stability theorem,* The J. P. LaSalle Memorial Lecture, Brown University.

October 1986: *Computer Aided Analysis of Dynamical Systems,* ACMP Conference, Boston University:

November 1986: *Homoclinic Orbits in Almost Periodic Systems,* Midwest Dynamical Systems Seminar.

January 1987: *Homoclinic Orbits in Almost Periodic Systems,* Dynamics Days, San Diego.

June 1987: *Almost periodic Hamiltonian systems,* Conference on Hamiltonian Dynamical Systems, Boulder.

October 1987: *Computer Aided Analysis of Dynamical Systems,* ACMP Conference, Washington, D.C.

October 1987: *A retrospective on Hamiltonian systems (6 lectures),* Ecole Polytechnique, Palaiseau, France.

October 1987: *The determination of the derivatives in Brown's lunar theory.* Bureau de Longitudes, Paris.

October 1987: *Homoclinic orbits in almost periodic systems,* Universitaires de Namur, Namur, Belgium.

March 1988: *A new proof of the Poincaré's center theorem,* International Conference on the Theory and Application of Differential equations, Columbus, Ohio.

April 1988: *Some normalization theorems for Hamiltonian systems.* Conference on Control Theory and Dynamical Systems (A conference in honor of Larry Markus' 65th birthday), University of Minnesota.

July 1988: *Stability and bifurcations in Hamiltonian systems,* SIAM Minisymposium on Computer Aided Proofs in Analysis.

July 1988: *Bifurcations of central configurations in the N-body problem,* Division of Dynamical Astronomy Conference, Washington, D.C.

August 1988: *Stability and bifurcations in almost periodic systems,* New Directions in Dynamical System (A conference in honor of Jack Hale's 60th birthday), Brown University,

October 1988: *On chapter nine,* Northwestern University.

November 1988: *Chaos in almost periodic systems,* Auburn University.

January 1989: *Bifurcation analysis*, Special Session on Nonlinear Science, Annual Meeting of the AMS, Phoenix.

March 1989: *Bifurcation and Stability by Lie Transforms*, Computer Aided Proofs in Analysis, University of Cincinnati.

June 1989: *Bifurcation theory using computers*, Workshop on Symbolic Computation in Differential equations, Institute for Mathematics and its Applications

September 1989: *Introduction to Hamiltonian dynamical systems (3 lectures)*, Opening Workshop on Dynamical Systems, Institute for Mathematics and its Applications, University of Minnesota.

October 1989: *Stability and bifurcations in Almost Periodic Systems.* Invited Lecture AMS Regional Meeting, Muncie, IN.

November 1989: *Lectures on Hamiltonian Systems (3 lectures),* Cleveland Geometry-Topology Seminar, John Carroll U., Case-Western Reserve, Cleveland State.

April 1990: *Apollonus coordinates, the N-body problem, and continuation of periodic solutions,* Institute for Mathematics and its Applications.

June 1990: *Apollonus coordinates, the N-body problem, and continuation of periodic solutions,* Mécanique céleste et systèmes hamiltoniens, Luminy, France.

July 1990: *Apollonus coordinates, the N-body problem, and continuation of periodic solutions,* Differential Geometry and Hamiltonian Systems, University of Toledo, Toledo, Ohio.

March 1991: *Global phase structure of the restricted isosceles three-body problem with positive energy*, International Dynamical Systems Conference, Northwestern University, Evanston, Illinois.

May 1991: *The analysis of Hamiltonian systems using an algebraic processor*, The University College of Wales, Aberystwyth, Wales.

May 1991: *Horseshoes in almost periodic systems,* University of Warwick, Coventry, England.

May 1991: *Apollonius coordinates, the N-body problem, and continuation of periodic solutions,* Mathematics Research Centre, Coventry, England.

October 1992: *Comet like periodic orbits for the N-body problem*, International Symposium on Hamiltonian Systems and Celestial Mechanics, CIMAT, Quanajuto, Mexico.

November 1992: *Comet like periodic orbits for the N-body problem*, Ohio State University, Columbus, Ohio

February 1992: *Relative equilibria and periodic solutions in the N-body problem*, University of Maryland, College Park, Maryland

May 1992: *An introduction to normal forms*, Computer Algebra and Differential Equations, Luminy, France.

September 1992: *Relative equilibria and periodic solutions in the N-body problem*, Fields Institute for Research in Mathematical Sciences, Waterloo.

January 1994: *Periodic orbits in the N-body problem*, College of William and Mary.

July 1994: *Integral manifolds of the spatial three-body problem*, SIAM Minisymposium on Hamiltonian Systems, San Diego.

September 1994: *Comet like periodic solutions of the n-body problem*, International Meeting on Ordinary Differential Equations and their Applications, Florence, Italy.

January 1994: *Computing normal forms for Poisson systems*, Special session on Scientific Computing at AMS meeting, Cincinnati.

September 1994: *Integral manifolds of the spatial three-body problem,*, Hamiltonian Systems and Celestial Mechanics, Cocoyoc, Mexico.

September 1995: *Limit periodic functions, adding machines, and solenoids*, Dynamics Seminar, Northwestern University.

October 1995: *Comet-like periodic solutions of the N-body problem*, Celestial Mechanics Seminar, Northwestern University.

November 1994: *Integral manifolds of the spatial three-body problem,* Midwest Dynamical Systems Seminar, Northwestern University.

February 1995: *Lectures on periodic solutions of the N-body problem,* (a short course) Universidade Federal de Pernambuco, Recife, Brazil.

May 1995: *Periodic solutions of the N-body problem,* SIAM Minisymposium on the N-body problem, Snowbird, Utah.

May 1995: *Integral manifolds of the spatial three-body problem,* SIAM Minisymposium on Applied Hamiltonian Systems, Snowbird, Utah.

June 1995: *Reduction, Scaling and Normalization,* AMS Summer Conference on the N-Body Problem, University of Washington.

October 1995 *Limit periodic functions, adding machines and solenoids*, Midwest Dynamical Systems Seminar, University of Cincinnati.

February 1996 *Integral manifolds of the three-body problem*, Georgia Institute of Technicalogy, Atlanta, Georgia.

April 1996 *Integral manifolds of the three-body problem*, University of Indiana, Bloomington, Indiana.

April 1997 *KAM theory for the restricted and full 3-body problem*, Dynamical Systems Seminar, Centre de Recerca Matemàtica, Spain.

April 1997 Ω-*Stability of skew dynamical systems*, Dynamical Systems Seminar, Universitat de Barcelona, Spain.

May 1997 *Solenoids, and other limit sets in dynamical systems*, the Fundació Banco Bilbao Vizcaya Scholar Lecture, Centre de Recerca Matemàtica, Spain.

May 1997 *Continuation of Periodic Solutions and KAM Tori*, Grupo de Mecánica Espacial, Universidad de Zaragozo, Spain.

May 1997 *Adding machines, and solenoids in dynamical systems*, Grupo de Mecánica Espacial, Universidad de Zaragozo, Spain.

March 1998: *Cross sections in the planar and spatial three-body problem*, Global Analysis: Thirty Years Later, University of Cincinnati.

July 1998: *Cross sections in the three-body problem*, International Astronomical Union: 172 Colloquium, Namur, Belgium.

September 1998: *Two conjectures of Birkhoff*, Third Americas Conference on Differential Equations and Nonlinear Dynamics, Georgia Institute of Technology

October 1998: *Two conjectures of Birkhoff*, Queen's University, Kingston, Ontario.

December 1998: *Evolution of stable and unstable manifolds*, Third International Symposium on Hamiltonian Systems and Celestial Mechanics, Patzcuaro, Mexico.

December 1998: *Cross sections in the three-body problem* and *Doubly symmetric periodic solutions in the restricted three-body problem*, Universidad Autonoma Metropolitana, Mexico.

January 1999: *Two conjectures of Birkhoff*, Special Session on Hamiltonian Mechanics: Applications to Celestial Mechanics and Chemistry, Annual Meeting of the American Mathematical Society, San Antonio, Texas

April 1999: *Integral manifolds in the regularized restricted three-body problem*, Midwest Dynamical Systems Seminar, University of Michigan.

September 1999: *Integral manifolds in the regularized restricted three-body problem*, Georgia Institute of Technology.

September 1999: *The evolution of invariant manifolds*, Dynamical Systems Seminar, Georgia Institute of Technology.

September 2000: *Short course on bifurcation and stability*, Massess Summer School, Peyresq, France.

May 2001: *The evolution of invariant manifolds*, SIAM Minisymposium, Snowbird, UT.

October 2001: *Are Hamiltonian flows geodesic flows?*, Midwest Dynamical Systems Seminar, University of Colorado.

March 2002: *Are Hamiltonian flows geodesic flows?*, Conference on Mechanics and Symmetry, University of Warwick.

May 2002: *The evolution of invariant manifolds*, University of Southampton, Southampton, UK.

May 2002: *The evolution of invariant manifolds*, Imperial College, London.

July 2002 *Comet like periodic solutions of the N-body problem*, Americas Five Conference, University of Alberta

November 2002: *Solenoids and adding machines*, Markus at 80, University of Minnesota.

June 2003: *Comet like periodic solutions of the N-body problem*, Variational Methods in Celestial Mechanics, American Institue of Mathematics, Palo Alto, CA.

April 2004: *Elliptic relative equilibrium*, Hamiltonian Dynamics and Celestial Mechanics, PIM, Banff.

May 2004: *Integral manifolds of the three-body problem*, Workshop on Hamiltonian Dynamical Systems, Le Centre de Recherches Mathmatiques, Montral.

June 2005: *Integral manifolds of the three-body problem*, Universidad Pública de Navarra, Pamplona, Spain.

June 2005: *Elliptic relative equilibrium in the N-body problem*, VII-th Spanish Workshop on Celestial Mechanics, Universidade de Santiago de Compostela, Rianxo, Spain.

September 2005: *Elliptic relative equilibrium in the N-body problem* CELMEC III in Viterbo, Italy.

May 2006: *Elliptic Relative Equilibria in the N-Body Problem*, Dynamical Systems Weekend, University of Missouri-Columbia.

September 2007: *Adding Machines and Solenoids in Hamiltonian Systems*, Queen's University, Kingston, Ontario.

October 2007: *Adding Machines and Solenoids in Hamiltonian Systems*, AMS Sectional Meeting, Chicago, IL.

April 2008: *The evolution and bifurcation of invariant manifolds*, Dynamical Systems and Topology (Bobfest), Tossa de Mar, Catalunya, Spain.

April 2008: *The evolution and bifurcation of invariant manifolds*, Dynamical Systems Seminar, Universitat de Girona, Girona, Catalunya, Spain.

May 2009: *Periodic Solutions in Hamiltonian Systems, Averaging, and the Lunar Problem*, Division of Dynamical Astronomy, Virginian Beach.

December 2010: *Periodic Solutions in Hamiltonian Systems, Averaging, and the Lunar Problem*, HamSys 2010: Symposium on Hamiltonian Systems and Celestial Mechanics, Mexico City.

May 2011: *Normally Stable Hamiltonian Systems*, Hamiltonian Dynamics and Celestial Mechanics, Castro Urdiales, Spain.

November 2011: *A Trilogy on a Point*, Wilfrid Laurier University, Waterloo, Canada.

September 2012: *Stability of Hamiltonian System in a Limiting Case*, University of Toledo.

February 2013: *Stability of Hamiltonian System in a Limiting Case*, Conference on Hamiltonian Systems and Celestial Mechanics, Centre de Recerca Matemàtica, Montreal, Canada.

June 2014: *Normally stable Hamiltonian systems*, Conference on Hamiltonian Systems and Celestial Mechanics (HAMSYS2014), Centre de Recerca Mathemàtica, Bellaterra, Spain.

September 2015: *Bifurcation and stability in a limiting case*, Conference on Hamiltonian Systems and Celestial Mechanics, BIRS, Oaxaco, Mexico.

July 2017: *Asymptotic Stability Estimates near an Equilibrium Point*, Conference on Geometry of Differential Equations, Real and Complex, Montreal,, Canada.