

DOE OUTSTANDING JUNIOR INVESTIGATOR PROGRAM AWARDEES

FISCAL YEAR	PRINCIPAL INVESTIGATOR	INSTITUTION AT TIME OF AWARD	PROPOSAL TITLE
2008	Frederick Deneff Ivan Furic Karsten Heeger	Harvard University Florida, University of Wisconsin, University of	OJl-Black Holes, String Vacua and Superconductors TeV Muons - Heralds of New Physics at the LHC Precision Studies of the Reactor Antineutrino Spectrum and the Search for Theta 13 at Daya Bay
	Dragan Huterer Jonathan Link	Michigan, University of Virginia Polytechnical Institute	Probing the Nature of Dark Energy With SNAP and DES Experimental Studies in Neutrino Masses and Mixing Angles
	Yurii Maravin Radu Roiban	Kansas State University Pennsylvania State University	The Path to Discoveries With the CMS ECAL Detector Lessons From String Theory, Gauge Theory and Gravity
	Lian-Tao Wang Daniel Whiteson	Princeton University California, University of at Irvine	Discovery and Interpretation of New Physics in the LHC Era New Physics With Electrons and Muons at ATLAS
	Peter Wittich	Cornell University	Searches for Physics Beyond the Standard Model and Triggering on Proton-Proton Collisions at 14 TeV LHC
	2007	Walter Goldberger	Yale University
Thomas Kutter		Louisiana State University	Optimization, Construction, and Commissioning of the Side Muon Range Detector for the T2K Off-Axis Neutrino Long Baseline Experiment
Francis Petriello Alexi Safanov		Wisconsin, University of Texas A&M University	OJl: Uncovering the Secrets of Nature at Colliders DOE OJl: The Path to SUSY/Higgs Discovery at the LHC: Taus as a Critical Component
Marcus Spradlin Rainer Wallny		Brown University California, University of at Los Angeles	Mathematical Structures in Gauge and String Theory OJl: Advanced Analysis Techniques for High pT Physics and an Improved Beam Conditioning Monitoring System for Hadron Colliders
2006	Christian Bauer	Lawrence Berkeley National Laboratory	Model independent predictions of strong interaction effects
	Hsin-Chia Cheng	California, University of at Davis	New Physics at the Energy Frontiers
	Robin D. Erbacher	California, University of at Davis	Exploiting the Energy Frontier
	Yuri Gershtein	Florida State University	Recovering the Intrinsic Electromagnetic Energy Resolution in CMS
	Sunil R. Golwala	California Institute of Technology	A Weakly-Interacting Massive Particle Dark Matter Detector Using Microwave Kinetic Inductance Phonon Sensors
	Norbert Neumeister	Purdue University	Reconstruction and Selection of Muons for Early Physics Discoveries at the LHC
	Leonardo Rastelli	New York, State University of at Stony Brook	Open Strings
	Neal Weiner	New York University	Beyond the Standard Model: The Weak Scale, Neutrino Mass and the Dark Sector
2005	Thomas Blum Daniel Chung Glenn Horton-Smith Hong Liu	Connecticut, University of Wisconsin, University of Kansas State University Massachusetts Institute of Technology	Precision $N_f = 2 + 1$ Lattice QCD Calculations Connecting Cosmology and High Energy Theory Toward New Discoveries at Low Energy Neutrino Experiments Spacelike Singularities in AdS/CFT
	Owen Long	California, University of at Riverside	A Program to Study CP Asymmetries in Penguin-Dominated B Decays at BABAR
	Lubos Motl Evelyn Thomson	Harvard University Pennsylvania, University of	Spectrum of M-theory, Black Holes, and Matrix Theory Research in High Energy Physics

2004	Albion Lawrence Konstantin Matchev	Brandeis University Florida, University of	String Theory and the Macroscopic World Searches for New Phenomena in Particle Physics and Astrophysics
	Petar Maksimovic	Johns Hopkins University	Enhancing the CDF's B physics program with a faster data acquisition system
	Yasunori Nomura	California, University of at Berkeley	Symmetry Breaking, Unification, and Theories Beyond the Standard Model
	David Casper	California, University of at Irvine	An Experimental Research Program in Neutrino Physics and Nucleon Decay
	David Berenstein	California, University of at Santa Barbara	String Theory and Large N Gauge Theories
	David Stuart	California, University of at Santa Barbara	Searches for New Phenomena in CDF-II with Forward Silicon Tracking
	Henric Krawczynski	Washington University	Using VERITAS to Explore Supermassive Black Holes and the Early Structure Formation in the Universe
2003	Mina Aganagic Richard Gaitskell	Washington, University of Brown University	String Theory Dynamics with Little Supersymmetry Development of Advanced Photo Detectors for WIMP Dark Matter Xe Detector Array
	David Kaplan	Johns Hopkins University	Physics Beyond the Standard Model and Electroweak Symmetry Breaking
	Kirill Melnikov Mark Messier	Hawaii, University of Indiana University	Perturbative Quantum Field Theory: Methods and Applications Development of an Experiment to Search for Oscillations of Muon Neutrinos to Electron Neutrinos Using the NuMI Neutrino Beam
	Kate Scholberg Witold Skiba	MIT Yale University	Outer Detector Work on Super-Kamiokande and K2K Physics at the TeV Scale and Beyond
	Peter Gorham	Hawaii, University of	Research in Radio-frequency Detectors for High Energy Physics and Particle Astrophysics
2002	Michael Hildreth David Kirkby	Notre Dame, University of California, University of at Irvine	Optimizing Higgs Discovery Prospects at the Tevatron Fundamental Symmetries of B Decays
	Zoltan Ligeti	Lawrence Berkeley National Laboratory	Physics of Heavy Hadrons
	Kevin Pitts Martin Schmaltz Ying Wu	Illinois, University of Boston University Duke University	A Stereo Tracking System for the CDF Detector Physics Beyond the Standard Model 3D Magnetic Field Effects on the Beam Dynamics in the Next Generation High Energy Physics Accelerators
	Darin Acosta Andrew Brandt	Florida, University of Texas, University of at Arlington	Search for Fundamental Scalar Particles at Hadron Colliders A Forward Proton Detector for the D Zero Experiment
	Csaba Csaki Regina Demina Ulrich Heintz Wayne Hu	Cornell University Kansas State University Boston University Chicago, University of	Physics of Extra Dimensions Radiation Hard Silicon Layer 0 and D0 Discovery Potential Search for the Higgs Boson with the D0 Detector Fundamental Physics from the Cosmic Microwave Background and the Large-Scale Structure of the Universe
2001	Matthew Strassler Raman Sundrum James Wells	Pennsylvania, University of Johns Hopkins University California, Univ. of at Davis	At the Junction of Particle Physics, Field Theory and String Theory Research in Theoretical High Energy Physics Elucidating the Phenomenological Consequences of Electroweak Symmetry Breaking Theories
	Steven Gubser Lam Hui Ashutosh Kotwal Frank Krennrich	Princeton University Columbia University Duke University Iowa State University	Strings and Supergravity applied to Gauge Theory The Universe as a Laboratory for New Physics Precision Electroweak Measurements on CDF II A Search for Microsecond Gamma Ray Bursts from Primordial Black Holes
	Meenakshi Narain	Boston University	A Precision Measurement of the Top Quark Mass at the Fermilab Tevatron
2000	David P. Saltzberg	California, UCLA	A New Search for Ultra High Energy Neutrinos and Associated Accelerator Measurements

1999	Amihay Hanany	MIT	Outstanding Junior Investigator Program
	John D. Hobbs	New York, State Univ. of at Stony Brook	Searches for New Physics Using Events with Detached Vertices
	Joseph Kroll	Pennsylvania, University of	A Program to Study the Weak Decays of B Hadrons with the CDF Detector at the Fermilab Tevatron
	Kevin S. McFarland	Rochester, University of	Design of the CDF RUN II Level-3 Trigger and the Search for New Physics of Top Quarks
	Eva Silverstein Washington Taylor	SLAC MIT	String Theory, Field Theory, and Supersymmetry Breaking Outstanding Junior Investigator Program
1998	James H. Buckley	Washington University	A Search for High Energy Gamma-Rays from Neutralino Annihilation in the Galactic Center Region
	Paul Fendley	Virginia, University of	Non-Perturbative Quantum Field Theory
	Richard E. Hughes	Ohio State University	Top Quark Physics and the CDF-II Trigger Track Processor
	Robert G. Jacobsen	California, UCB	CP Violation Studies with Modern Software Techniques
	Marc Kamionkowski	Columbia University	Cosmological Probes of New Physics
	Juan Maldacena	Harvard University	Outstanding Junior Investigator Program "Strings and Black Holes"
	Krishna Rajagopal	MIT	Outstanding Junior Investigator Proposal for Prof. Krishna Rajagopal
1997	John M. Butler	Boston University	The DO Experiment: Particle Physics at the High Energy Frontier
	Shamit Kachru	California, UCB	Outstanding Junior Investigator Proposal for Professor Shamit Kachru
	Robert Leigh	Illinois, University of	An Outstanding Junior Investigator Proposal to Support Research in Quantum Field Theory and String Theory
	Vittorio Paolone	Pittsburgh, University of	Participation in FNAL Experiment E872: Direct Search For The Tau Neutrino
	Brian L. Winer	Ohio State University	Outstanding Junior Investigator Top Physics and Track Finding at CDF II
1996	Janet M. Conrad	Columbia University	Construction of a Decay Channel for the NuTeV Experiment at Fermilab
	Aida X. El-Khadra	Illinois, University of	Support Research on Standard Model Phenomenology with Lattice QCD
	David Gerdes	Johns Hopkins University	Top Quark Physics with an Upgraded CDF Tracking System
	Donna Naples	Kansas State University	Multisampling Drift Chamber for COSMOS and NuTeV
	Lynne H. Orr Larus Thorlacius	Rochester, University of Princeton University	Top Quark Physics and Related Issues in Phenomenology Strings, Membranes and Black Holes
1995	Claudio F. Campagnar	California, UCSB	Top Quark Physics and Electronics Upgrade at CDF
	Sarah Eno	Maryland, University of	Physics With the D0 Detector and the D0 Upgrade
	Maarten Golterman	Washington University	The Standard Model and Lattice Gauge Theory
	Krishna S. Kumar	Princeton University	Precision Electroweak Experiments with Polarized Electrons
	Martin J. Savage	Carnegie Mellon University	Studies in Theoretical Particle Physics
	Samson Shatashvili	Yale University	Duality and Conformal Field Theory Structures in 4d Supersymmetric Gauge Theories
	Elizabeth H. Simmons	Boston University	Particle Theory Beyond the Standard Model
1994	Michael Bershadsky	Harvard University	Topological String Theories
	Edward C. Blucher	Chicago, University of	Study Electroweak and B Physics in pp Collisions at 1.8 TeV
	Adam F. Falk	Johns Hopkins University	Research in Theoretical High Energy Physics
	Chang Kee Jung	New York, State Univ. of at Stony Brook	Experimental Searches for Phenomena Involving Nucleon Decays or Neutrino Oscillations with the Super-Kamiokande Detector
	Serguei Khlebnikov	Purdue University	Collective Phenomena in High Energy Collisions
	James Rosenzweig	California, UCLA	Development of an Asymmetric Emittance RF Photoinjector for Linear Collider Applications
	Mats A. Selen	Illinois, University of	Research and Development of a Cherenkov Correlated Timing Particle Identification System for High Luminosity E+E- Colliders
	German Valencia	Iowa State University	Projects on Rare Decays and Electroweak Symmetry Breaking

1993	Zvi Bern	California, UCLA	Next to Leading Order QCD Theoretical Physics Research under the DOE OJI Program Detector Development and a Measurement of the W Coupling in the D0 Experiment Particle Dark Matter, the Early Universe, and Physics Beyond the Standard Model Time Dependent Solutions in String Theory Research and Development of High-Magnetic-Field High-Q Microwave Cavities in a Search for Pseudoscalar Dark Matter Third Generation Fermions in CLEO-II Construction of a Robust Detector for SSC Astroparticle Physics
	John Ellison	California, UCR	
	Kim E. Griest	California, UCSD	
	David Kutasov	Chicago, University of	
	Leslie Rosenberg	MIT	
	Thomasz Skwarnicki	Southern Methodist University	
	Terrence P. Walker	Ohio State University	
1992	R. Sekhar Chivukula	Boston University	Topics in Elementary Particle Physics A Study of Quark and Gluon Jets and of the Long Distance QCD Force Field at LEP A Next Generation High Energy Neutrino Experiment at the Fermilab Tevatron Projects on Precision Tests of Quantum Chromodynamics Outstanding Junior Investigator Program - Electroweak Symmetry Breaking, Model Building, and C_p Violation Heavy Quark Physics with CDF Develop a Particle Identification System Based on Time of Flight Measurement for B-Factory
	John William Gary	California, UCR	
	Sanjib Mishra	Harvard University	
	Jianwei Qiu	Iowa State University	
	Lisa Randall	MIT	
	Paul L. Tipton	Rochester, University of	
	Hitoshi Yamamoto	Harvard University	
1991	Dante E. Amidei	Michigan, University of	Exploit Secondary Vertex Information at the CDF Detector Quantum Gravity - Outstanding Junior Investigator Program Topics in Particle Physics Prototype Study of a New Central Drift Chamber for CLEO II and Investigation of the T Paradox Using CLEO II - Outstanding Junior Investigator Program Provide Reliable Calculations of Phenomenologically Relevant Parameter from Lattice QCD - Outstanding Junior Investigator Program Search for Very Rare Kaon Decays - Outstanding Junior Investigator Program Silicon Tracker Proposal for the D0 Upgrade - Outstanding Junior Investigator Program
	Steven Carlip	California, UCD	
	Andrew G. Cohen	Boston University	
	K. K. Gan	Ohio State University	
	Gregory Kilcup	Ohio State University	
	Karol Lang	Texas, University of, Austin	
	Heidi Schellman	Northwestern University	
1990	Steven B. Giddings	California, UCSB	Problems in Theoretical Physics - Outstanding Junior Investigator Program Studies in Theoretical Particle Physics Study of Direct C_p Violation in the Neutral Kaon System - Outstanding Junior Investigator Program CDF (Collider Detector at Fermilab) - Outstanding Junior Investigator Program Improved Numerical Methods for Quantum Field Theory
	David H. Kaplan	California, UCSD	
	Harry Nelson	California, UCSB	
	Krzysztof Sliwa	Tufts University	
	Alan Sokal	New York University	
1989	Anna Hasenfratz	Florida State University	Theoretical High Energy Elementary Particle Physics High Energy Physics Study of Hyperons and Beauty Particles - Outstanding Junior Investigator Laboratory for Nuclear Science-Outstanding Junior Investigator Program Experiment E-791 at Fermilab - Outstanding Junior Investigator Program CCD Vertex Detector for SLD - Outstanding Junior Investigator Program Lattice Calculations in the Standard Model
	Paul E. Karchin	Yale University	
	Kam-Biu Luk	California, UCB	
	Aneesh V. Manohar	MIT	
	Milind V. Purohit	Princeton University	
	Jeffrey Richman	California, UCSB	
	Stephen Sharpe	Washington, University of	

1988	Robert Brandenberger	Brown University	Physics in the Very Early Universe - - Outstanding Junior Investigator Program
	Nicholas Hadley	Yale University	High Energy Physics "Outstanding Junior Investigator Program"
	Daniel R. Marlow	Princeton University	A Multiprocessor Computer System for the Analysis of Data from Brookhaven Experiment E787 "Outstanding Junior Investigator Program"
	Ann E. Nelson	Stanford University	Studies in Theoretical Particle Physics
	Philip Nelson	Boston University	Research in Theoretical Particle Physics - Mathematical Structures in Physics - - - Outstanding Junior Investigator Program
	Patricia Rankin	Colorado, University of	Particle Physics Research "Outstanding Junior Investigator Program"
	Yau W. Wah	Chicago, University of	Measure the Cpt Violating Parameter of the Neutral Kaon System to 0.2 Accuracy and to Search for the Rare Kaon Decay Mode
	L. C. R. Wijewardhana	Cincinnati, University of	Investigations in Field Theory and Particle Physics
1987	Mark Bowick	Syracuse University	Aspects of Modern Elementary Particle Physics - Outstanding Junior Investigator Program
	Darwin Chang	Northwestern University	Theoretical Studies in High Energy Physics
	Emil J. Martinec	Chicago, University of	Topics in String Theory
	Michael Ogilvie	Washington University	Investigations in Quantum Field Theory (Outstanding Junior Investigators Program)
	Richard Partridge	Brown University	Experimental High Energy Physics - Outstanding Junior Investigator Program
	Wesley H. Smith	Columbia University	Develop the Calorimeter Trigger for Zeus at Hera
	Andrew Strominger	California, UCSB	Problems in Superstring Theory
1986	Daryl DiBitonto	Texas A & M University	Search for Diffractive Top at Tevatron Energies - Outstanding Junior Investigator Program
	Michael Dine	City College of New York	Beyond the Standard Model
	Paul Ginsparg	Harvard University	Topics in Field Theory - Outstanding Junior Investigator Program
	Steven Gottlieb	Indiana University	Investigations in Theoretical High Energy Physics - Outstanding Junior Investigator Program
	Thomas W. Kephart	Vanderbilt University	Investigations in Theoretical Elementary Particle Physics - Outstanding Junior Investigator Program
	Antti Niemi	Ohio State University	Topological Aspects of Quantum Field Theory, and of Finite Temperature Quantum Field Theory
	Carl R. Rosenfeld	South Carolina, University of	Exploratory Particle Physics Using the AMY Detector
	Gregory Tarle	Michigan, University of	Development of Large Detectors for Monopoles and Neutrinos
1985	Eric Braaten	Northwestern University	
	Daniel Caldi	Connecticut, University of	
	Robert Cousins	California, UCLA	
	George Gollin	Princeton University	
	Howard Haber	California, UCSC	
	Richard Kass	Ohio State University	
	Sherwin Love	Purdue University	
	William Molzen	Pennsylvania, University of	
	Herbert Neuberger	Rutgers University	
Thomas Weiler	Vanderbilt University		
1984	Harris Kagan	Ohio State University	
	Wai-Yee Keung	Illinois, University of at	
	David Leventhal	Florida State University	
	William Louis	Princeton University	
	Joseph Rohlf	Harvard University	
	Qaisar Shafi	Bartol Research Institute	
	Mark Wise	Caltech	

1983	Ashok Das David Koltick So Young Pi Amargit Soni Scott Whitaker	Rochester, University of Purdue University Boston University California, UCLA MIT
1982	Thomas DeGrand R. Hagstrom John LoSecco Paul Steinhardt Michael Witherell	Colorado Argonne National Laboratory Caltech Pennsylvania, University of California, UCSB
1981	Kevin Cahill Thomas Clark John P. Cumalat Thomas Curtright Nilendra Deshpande	New Mexico, University of Purdue University Colorado, University of Florida, University of Oregon, University of
1980	George Brandenburg John C. Collins Marjorie Corcoran Paul Frampton David Hitlin Joseph Kiskis Michael Marx B. Robinson Eli Rosenberg	MIT Illinois Institute of Technology Rice University North Carolina, University of Caltech California, UCD New York, State Univ. of at Stony Brook Pennsylvania, University of Ames Laboratory, Iowa
1979	Emanuel Derman Michael Einhorn William Fischler R. Hendrick Ian Hinchliffe Richard Imlay Antal Jevicki K. Mikaelian Joseph F. Owens Ramamurti Shankar	Colorado, University of Michigan Pennsylvania, University of St. Bonaventure University Lawrence Berkeley Laboratory Louisiana State University Brown University Oklahoma State University Florida State University Yale University
1978	Carl Bender Robert Cahn Thomas Dombeck Thomas Gaisser T.-Y. Ling Alan Litke Howard Nicholson D. Potter F. Taylor Sau Lan Wu	Washington University California, UCD Maryland, University of Bartol Research Institute Ohio State University Stanford University Mt. Holyoke College Rutgers University Northern Illinois University Wisconsin, University of