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## Research:

**Since August 2004:** Assistant and then associate professor at the Department of Physics of the University of Utah. I have been working in the gamma ray group with the VERITAS collaboration until 2012. Also I have initiated the ongoing interest in the possibilities of implementing intensity interferometry with Cherenkov telescope arrays, a project in which I remain currently involved. In 2012 I left the VERITAS collaboration and started working in part on solid state physics, taking advantage of my experience in computation (atoms on graphene) and in part on stochastic mechanics in relation to scale relativistic ideas on the foundation of quantum mechanics. As time goes I tended to dedicate most of my time on this latter topic. However the lack of success with publications pushed me to start activities in new directions. In 2019, encounters led me to consider the problem of thermal noise in the optics of gravitational wave detectors. While continuing my work on Scale Relativity and my involvement in Stellar Intensity Interferometry, I am coordinating the Gravitational Radiation Research Group at the University of Utah, now a member of the LIGO Scientific Collaboration since August 2019.

**August 1998-July 2004:** Postdoctoral research at the Department of Physics and Astronomy of Iowa State University for the GRANITE and VERITAS collaborations with Professor Krennrich including: studies of diffuse  $\gamma$ -ray emission from the galactic plane; design of VERITAS front-end electronics; development of instrumentation for detecting extremely fast  $\gamma$ -ray bursts (SGARFACE); Cherenkov telescope calibration techniques; observations to detect annihilation radiation from WIMP candidates from globular clusters; observations of M87

**November 1997-June 1998:** Postdoctoral research at the ICRR of Tokyo University with Professor Kifune, head of the CANGAROO VHE gamma-ray collaboration. My work included 3.8m telescope data analysis and design of the optics of the new CANGAROO detectors.

**June 1997- August 1997:** Quality control management for the department of Scientific Computation of ETPM (Entreprise de Travaux Pétroliers Maritimes).

**June 1996-May 1997:** Permanent physicist on site for the CAT (Cherenkov Atmospheric

Telescope) experiment at the start-up phase. This position was funded by LPC of the Collège de France.

**June 1993-June 1996:** Thesis work directed by Professor B. Degrange at the LPNHE of the Ecole Polytechnique. *Subject:* “Conception and construction of a telescope for very high energy (100GeV-10TeV) gamma astronomy using the atmospheric Cherenkov radiation (CAT experiment)”. Thesis presented on June 4<sup>th</sup> 1996; given the title of Doctor of Physics at the Paris XI University with honorable mention and the congratulations of the jury.

## Teaching experience:

**Fall 2020:** Physics 5450, Introduction to quantum mechanics

**Spring 2020 :** Physics 3740, Introduction to Modern Physics

**Fall 2019 :** Physics 3210 - Physics for Scientists I

**Spring 2019 :** Physics 5110 - Introduction to Nuclear and Particle Physics

**Fall 2018 :** Physics 3210 - Physics for Scientists I

**Spring 2018 :** Physics 5110 - Introduction to Nuclear and Particle Physics

**Fall 2017 :** Physics 1500, Preparation to college physics

**Spring 2017 :** Physics 5110 - Introduction to Nuclear and Particle Physics

**Fall 2016 :** Physics 1500, Preparation to college physics

**Spring 2016 :** Physics 5110 - Introduction to Nuclear and Particle Physics

**Fall 2015 :** Physics 6730, Computational Physics I

**Spring 2015 :** Physics 6730, Computational Physics I

**Fall 2014 :** Physics 5510, Solid state physics I

**Spring 2014 :** Physics 5020, Theoretical Electricity & Magnetism & Statistical Physics

**Fall 2013:** Physics 5510, Solid state physics I

**Fall 2013:** Physics 6950-003, Introduction to astrophysics for science teachers

**Spring 2013 :** Physics 5020, Theoretical Electricity & Magnetism & Statistical Physics

**Fall 2012:** Physics 5450, Introduction to quantum mechanics

**Spring 2012 :** Physics 3740, Introduction to Modern Physics

**Fall 2011:** Physics 5450, Introduction to quantum mechanics

**Spring 2011:** Physics 3730, Computational Physics I.

**Fall 2010:** Physics 5450, Introduction to quantum mechanics

**Spring 2010:** Physics 3740, Introduction to Modern Physics

**Fall 2009:** Physics 3610/6610, Electronics I  
**Spring 2009:** Physics 2020, General Physics  
**Spring 2008:** Physics 2020, General Physics  
**Spring 2007:** Physics 6730, Computational Physics II.  
**Fall 2006:** Physics 3740, Introduction to Modern Physics.  
**Spring 2006:** Physics 6730, Computational Physics II.  
**Fall 2005:** Physics 1500, Preparation for University Physics.skip  
**Spring 2005:** Physics 6730, Computational Physics II.  
**Spring 2001:** Teaching assistant for A346, an astrophysics class.skip  
**Fall 2001:** Teaching assistant for Physics 310, an electronics and instrumentation class, and for Astro 120, an introductory astronomy class.  
**Spring 2000:** Teaching assistant for A346, an astrophysics class.  
**September-December 1999:** Teaching assistant for Physics 310, an electronics and instrumentation class.  
**1994:** Mathematics recitation for the DEUG SSM in Paris VI University.  
**August 1992-June 1993:** Nuclear Physics teaching at the EAMEA (Ecole des Applications Militaires de l'Energie Atomique) in Cherbourg during French military service.  
**1990-1994:** Teaching of experimental astronomy techniques for school teachers and amateur science group leaders.

## Academic Studies:

**1991-1992:** DEA “Champs Particules Matières” at Paris XI University.  
**1990-1991:** Maîtrise in Fundamental Physics at Paris XI University.  
*Training session:* (3 months) in the NSCL of Michigan State University.  
**1987-1990:** DEUG SSM and Licence in Fundamental Physics at Paris XI University. *Training session:* (1 month) at Laboratoire d'Optique de l'Observatoire de Marseilles.

## Students and postdocs supervised:

**Since Spring 2020:** Chris Ausbeck joined the LIGO group and works with Brecken Larsen on XRD analysis of nanolayered coating samples.

**Since February 2019:** two freshmen, Brecken Larsen and Conner Winder, are working with me at the design of a setup to measure mechanical energy dissipation in an optical element. Conner left the group during Spring 2020.

**October 2013-Spring 2018:** Mei-Hui Teh worked with me studying Scale Relativity. She has been doing bibliographical work and started analyzing data in search for the signature of some scale-relativistic effects on the orbital parameters of Keplerian systems. She successfully defended her thesis in spring 2018 but it was decided signature would be entered only once corrections and improvements will have been made to the manuscript. This was supposed to happen during summer 2018. I am not sure of the progress made.

**Spring 2016-Spring 2017:** Kevin McCarthy worked with me on a small project of data analysis focused on binary stars. Kevin's research adviser is Zheng. His intention was to work with me on stochastic mechanics and I advised him against this idea.

**January 2015-Spring 2017** Wen Jin worked with me at the development of diagrammatic Monte-Carlo tools. Wen's research adviser is Oleg Starykh. She is intending to graduate this fall.

**2013-2014:** Justin Talbot started working with me as a UROP undergraduate student. He was then supported from an MRSEC seed grant we obtained with Eugene. We developed numerical simulations of various type of impurities on graphene. We were not successful at including the Coulomb interrelation.

**2012-2013:** Sam Leventhal has been working with me as a UROP undergraduate student. He analysed extrasolar planet data, searching for the signature of some scale relativistic effects on the orbital parameters of Keplerian systems.

**2012-2013:** Farzaneh Sheidaei has been working in the gamma ray group as a postdoctoral research associate. I advised her as she worked on the absolute calibration of the VERITAS telescopes as well as on the observation of galactic objects with VERITAS.

**2011-2012:** Janvida Rou has been working with me as an undergraduate student. She help with the construction, programming and testing of electronics for intensity interferometry. She developed numerical programs for the simulation of quantum optical effects in the low intensity regime.

**From August 2008 to August 2011:** Sagar Godambe and Stephane Vincent worked with me and David Kieda as postdoctoral research associates. Sagar works on VERITAS data analysis concentrating active galactic nuclei and Stephane worked at the development of theoretical models of the magnetosphere of M87 central super massive black hole to explain the gamma-ray emission observed with VERITAS. Stephane also works on the development of the image template analysis for VERITAS

**2007-2012:** Paul Nunez worked with me as a graduate student. He worked on the Fourier transform phase recovery for model independent image reconstruction from intensity interferometer data and contributed to the analysis of VERITAS data. He graduated with a PhD in 2012.

**From January 2007 to July 2009:** Jose Cardoza worked with me and David Kieda, originally as a potential PhD student and then towards a Masters. He learned how to analyze VERITAS data and worked on how to integrate geomagnetic field effects in our analysis.

**From January 2006 to February 2012:** Michelle Hui worked with me as a PhD student on the absolute and relative calibration of the VERITAS telescopes and carried observations with the VERITAS telescope and did data analysis. The main piece of her PhD dissertation was our observations of M87 and their implication for the emission mechanisms at play in the close vicinity

of the central black hole.

**From April 2006 to July 2008:** Pierre Colin worked with me at exploring strategies for the development of a 10 TeV gamma-ray astronomy. He also worked on the analysis of VERITAS data with GrISU(tah) and took over the analysis of our M87 data.

**From January 2005 to December 2005:** Nathan Shepherd has been working with me on telescope absolute and relative calibration based on atmospheric Rayleigh scattering. This became the subject of his Masters of Instrumentation thesis and we published his work in the proceedings of the 29th ICRC in Pune, India.

**From December 2004 to January 2007:** Hakima Manseri has been working with me as a research associate. She contributed to the VERITAS offline analysis group, she helped me with the implementation of the optical test and calibration system for the VERITAS telescopes and she worked on the analysis of SGARFACE data.

## Funding:

- 2019: Together with Vikram Deshpande and Keunhan Park (Mechanical Engineering), we gratefully obtained a \$24,000 Seed Grant Funding from the University of Utah to work on gravitational detector thermal noise.

- 2016: Together with E.Mishchenko, we were awarded a MRSEC Seed grant of \$5,000 to study the interaction of adatoms on graphene .

- 2012: PI on an awarded SGER grant of \$55,624 for a proposal entitled “Prototype Test Bench for Stellar Intensity Interferometry with Atmospheric Cherenkov Gamma Ray Telescopes”

- 2011: Recipient of \$20,000 from Air Force Research under a contract for the production of a report in 2011.

- 2010: PI on a collaborative research NSF proposal entitled “AGIS - research for the next generation gamma-ray observatory” for which I would coordinate the simulation effort to characterize the instrument capabilities.

- Co-PI with David Kieda as PI on NSF grant “GeV-TeV astronomy”. This grant was recently renewed for the next three year cycle from 2009 to 2012 with \$999,146.00.

- In September 2007 I submitted a GI proposal to GLAST for a “Multi-wavelength study of M87 with GLAST, CHANDRA and VERITAS”. Denied.

- In September 2007 I submitted a SGER proposal to the astronomy section of NSF. It is entitled “Prototype Test Bench for Stellar Intensity Interferometry with Atmospheric Cherenkov Gamma-Ray Telescopes”. This proposal is still pending (!).

- In June 2007 I submitted a CAREER proposal to the astronomy section of NSF. It is entitled “Stellar Intensity Interferometry with Atmospheric Cherenkov Gamma-Ray Telescopes”. Denied.

- As part of an independent research, I have submitted a proposal to the Funding Incentive Seed Grant program of the University of Utah in August 2005 and was granted a \$29,000.00 support

- As part of an independent research, I have submitted a proposal to the Funding Incentive Seed Grant program of the University of Utah in February 2005 without success.

- As a member of the astronomy task force I work on a proposal to Willard Eccles foundation to obtain \$600,000 for the deployment of a 32” optical telescope for the Department of Physics.

- In 2006 I co-signed a proposal entitled “Technical development of telescopes for gamma-ray astronomy at energies above 10TeV: The TenTen Array” together with Gavin Rowell as the main investigator and others. This proposal was submitted to an Australian funding agency. The proposal was not granted any support in 2006 and resubmitted in 2007.

- In 2006 I Co-signed a proposal for Chandra observations entitled “Continued monitoring of the M87 jet” together with Daniel E. Harris as the principal investigator and others.

- In fall 2006 I Co-signed a NSF proposal for HAWC, a large field of view gamma-ray detector operating in the range from 1TeV to 100TeV to be constructed in Mexico.

- In January 2007 I signed as Co-PI a \$800,000.00 PREST proposal to the NSF for instrumenting the telescope of the Southern Utah Observatory.

## University and department services:

**2019-2020:** I continue to serve on both the College of Science Council the Academic Senate. I was also recently called to serve on the Committee on Student Affairs. Even more recently, I was assigned to the College of Science, Science Day 2019 Committee. I am not sure about the departmental committee on which I am supposed to serve other than the few RPTs to which I was assigned.

**2018-2019:** Within the department, I am chairing the common exam committee for a very last time and I am a member of the Student Awards Committee.

Within the College of Science, I am a member of the 2018 Science Day at the U committee and I joined the Interdisciplinary Science Core Curriculum committee. Additionally, I was nominated as a Member of the College of Science Council (two years).

Also, at the University level I just had the additional distinct privilege of being nominated as a member of the Academic Senate (three years).

**2017-2018:** Graduate advising committee, Common Exam committee in the quality of chair, Graduate Program Development, Diversity Committee, Science Day at the U.

**2016-2017:** Graduate advising committee, Common Exam committee in the quality of chair, Celebration Committee, Diversity Committee

**2015-2016:** Graduate advising committee, Common Exam committee

**2014-2015:** Graduate advising committee, Colloquium committee chair, Common Exam committee

**2013-2014:** Awards committee and Common Exam committee

**2012-2013:** At the university level, I am a Personal and Election Committee member, a seed funding incentive grant committee member, and a IJSHS local organizing committee member. In the department, aside from RPT review committees memberships, I chair the Public Education and Outreach committee and a member of the colloquium and recruitment committees.

**2011-2012:** At the university level, I was a Personal and Election Committee member, a seed funding incentive grant committee member, and a IJSHS local organizing committee member. In the department, aside from RPT review committees memberships, I was a member of the following committees: Public Education and Outreach, Futures, Admissions, Experimental Condensed Matter Search and the organizer of Science Day at the U for the Physics department.

**2010-2011:** At the university level, I was a Personal and Election Committee member, a seed funding incentive grant committee member, and a IJSHS local organizing committee member.

**2009-2010:** At the university level, I was a Personal and Election Committee member, a seed funding incentive grant committee member, a IJSHS local organizing committee member. Within the department, I was chair of the common exam committee, a member of the colloquium committee.

**2008-2009:** Still a member of the academic senate, of the seed funding incentive grant committee and chair of the academic appeal committee. I became a member of the IJSHS, replacing Sid Rudolph. I Coordinated the contribution of the physics department to Science Day 2008. In the Physics Department I was on the Astronomy Search Committee, Common Exam Committee and on the astronomy task force committee.

**2007-2008:** I was on the seed funding incentive grant committee, I was a member of the academic senate and the chair of the academic appeal committee. Within the department, I was on the astronomy search committee, on the Common Exam Committee and on the astronomy task force committee.

**2007-2008:** I was still on the seed funding incentive grant committee, I was a member of the academic senate and I became chair of the academic appeal committee. Within the department, I was on the astronomy search committee. I remained on the Common Exam Committee and was affected to the library committee, graduate admission committee and several auxiliary review committees in the quality of chair. I remained on the astronomy task force committee.

**2006-2007:** At the university level, I was affected to the seed funding incentive grant committee. Within the department, I became a member of the astronomy search committee working toward the hiring of the base for the development of the astronomy initiative. I remained on the Common Exam Committee and was affected to the library committee, graduate admission committee and several auxiliary review committees in the quality of chair. I remained on the shop facilities, astronomy observatory and astronomy task force committees.

**2005-2006:**At the university level, I was affected to the academic appeal committee. Within the department I was called by Pierre Sokolsky to participate in the astronomy task force. Sofar, I worked primarily on the preparation of a proposal to the Willar Eccles Foundation for an optical observatory. I was a member of the High Energy Astrophysics and Particles search committee chaired by Paolo Gondolo. I was member of the class demonstration search committee. I also was on several RPT committees as well as on the class demonstration, safety and shop and facilities committees.



**2004-2005:** I was only involved in an auxiliary RPT review committee.

## Other experiences and memberships:

- Organizer of the astronomy component of the July 2012 Navajo Math and Science Education workshop at the Dine college. Workshop PI: Hugo Rossi, U of U.
- Organizer of a workshop on Stellar Intensity Interferometry in January 2009.
- Member of the International Astronomical Union
- "Habilitation à diriger des recherches" thesis reviewer for l'Université Pierre et Marie Curie in Paris, France
- PhD reviewer for the Ecole Polytechnique, France.
- PhD reviewer for the University Paris VI Jussieu, France.
- Research proposal reviewer for the Region Île de France.
- Research proposal reviewer for the Agence Nationale de la Recherche, France.
- Research proposal reviewer for the Università degli Studi di Padova.
- Reviewer for the Journal of Quantum Information Science
- Reviewer for MNRAS
- Reviewer for the Journal of Engineering, Science and Technology (IJEST)
- Reviewer for the Astrophysical Journal
- Reviewer for Astronomy and Astrophysics
- Reviewer for Foundations of Science
- Reviewer for Astroparticle Physics
- Member of the Salt Lake Astronomical Society since 2006
- Registered Utah State Beekeeper since 2005

## Talks given outside the University of Utah:

- February 20<sup>th</sup> 2012, "VERITAS: Big Bad Telescopes and amazing photons", seminar, Kansas University
- February 20<sup>th</sup> 2012, "Twinkle twinkle little stars and let us know what you are", colloquium, Kansas University
- June 30th 2010 "Stellar intensity interferometry: imaging capabilities of air Cherenkov telescope arrays", SPIE Astronomical Instrumentation meeting in SanDiego.
- June 8th 2009 "Imaging Cherenkov telescopes and Stellar Intensity Interferometry", AltAz Initiative 2009 workshop in Pasadena.
- June 10th 2009 "VERITAS observation of the  $E_{\gamma}200\text{GeV}$  sky", 214th AAS meeting in Pasadena.
- April 7th 2009 "Stellar Imaging: Back to the Future?", Science Night Live presentation at Keys on Main, downtown Salt-Lake-City.
- December 15th 2008, "Vers un retour à l'interferometrie Hanbury Brown Twiss", invited seminar at the Observatoire de Meudon, France.
- July 28th 2008, "Toward a revival of stellar intensity interferometry", SPIE conference in Marseille, France
- May 18th 2008, "Intensity Interferometry", invited talk as a contribution to a JASON review.

- March 14th 2008, “Macro-telescope for nano-astronomy”, invited talk for the Centre de Recherche en Astrophysique du Quebec.
- November 8-9th 2007, “Large arrays of small telescopes”, invited talk at the Toward the Future of Very High Energy Gamma-ray Astronomy workshop at SLAC.
- September 10th 2007, “Stellar Intensity Interferometry with Air Cherenkov Telescope arrays”, University of Leeds
- September 13th 2007, “Stellar Intensity Interferometry with Air Cherenkov Telescope arrays”, Invited talk at the High Time Resolution Astronomy conference in Edinburgh.
- September 17-21th 2007, “Interferometry stellaire de second ordre”, Ecole Polytechnique in Palaiseau, France.
- April 18th 2007, “Gamma-ray astronomy”, monthly meeting of the Salt-Lake Astronomical Society.
- December 7th 2006, “Getting to the High Energy End”, Workshop: Locating PeV Cosmic-Ray Accelerators: Future Detectors in Multi-TeV Gamma-Ray Astronomy, University of Adelaide, Australia
- December 7th 2006, “VERITAS status and future plans”, Workshop: Locating PeV Cosmic-Ray Accelerators: Future Detectors in Multi-TeV Gamma-Ray Astronomy, University of Adelaide, Australia
- December 10th 2006, “Experimental Approaches to the High Energy End of Gamma-Ray Source Spectra”, Workshop: Ground-based Gamma-ray Astronomy: Towards the Future, Santa Fe, NM
- December 10th 2006, “ACTs and Intensity Interferometry”, Workshop: Ground-based Gamma-ray Astronomy: Towards the Future, Santa Fe, NM
- October 2005, “Galactic science in the 1-100 TeV domain”, Workshop: Ground-based Gamma-ray Astronomy: Towards the Future, University of California, Los Angeles
- October 2005, “Strategies associated with observations at 10TeV regime”, Workshop: Ground-based Gamma-ray Astronomy: Towards the Future, University of California, Los Angeles
- August 2005, “Absolute calibration of imaging atmospheric Cherenkov Telescopes”, 29th ICRC, Pune, India
- August 2005, “Using Atmospheric Cherenkov Telescopes as Intensity Interferometers”, 29th ICRC, Pune, India
- August 2005, “The VERITAS project”, Gamma-ray astronomy workshop, Mumbai, India
- April 2005, “VERITAS, status and prospects”, Physics at the end of the Galactic Cosmic Ray Spectrum, Aspen, Colorado
- October 18<sup>th</sup>, 2004, Idaho State University Physics Department colloquium in Pocatello.

## Refereed publications

• S.LeBohec, "The virial theorem for non-differentiable dynamical paths" is under preparation. The author has not decided yet which journal will get to reject it first.

• Saeed Naif Turki Al-Rashid, Mohammed A. Z. Habeeb, Stephan LeBohec, "Riccati equations as a scale-relativistic gateway to quantum mechanics", *Foundations of Physics* (2020) 50:191?203

• M.-H. Teh, L. Nottale and S. LeBohec, "Scale relativistic formulation of non-differentiable mechanics", *Eur. Phys. J. Plus* (2019) 134: 438; DOI: 10.1140/epjp/i2019-12840-6 • S. LeBohec, "Scale Relativistic signature in the Brownian motion of micro-spheres in optical traps", *International Journal of Modern Physics A* Vol. 32, No. 26, 1750156 (2017)

• N. Matthews, D. Kieda, and S. LeBohec, (Accepted/In press) "Development of a Digital Astronomical Intensity Interferometer: laboratory results with thermal light", *Journal of Modern Optics*, 1-9. DOI: 10.1080/09500340.2017.1360958

• S. LeBohec, J.Talbot & E. Mischenko "Suppression of diffusion of hydrogen adatoms on graphene by effective adatom interaction", *Phys. Rev. B* 93, 115402 (2016)

• S. LeBohec, J.Talbot & E. Mischenko "Attraction-repulsion transition in the interaction of adatoms and vacancies in graphene", *Phys. Rev. B* 89, 045433 (2014)

• Godambe, S. for the VERITAS collaboration, "Discovery of very high energy gamma rays from 1ES1044+122", to be submitted to the *Astrophysical Journal*.

• Vincent, S., Hui, M. & LeBohec, S., "Multi epoch study of the gamma ray emission in the M87 black hole magnetosphere", to be submitted to *MNRAS*

• Janvida Rou, Paul D. Nuez, David Kieda, Stephan LeBohec, "Monte-Carlo simulation of stellar intensity interferometry", *Mon. Not. R. Astron. Soc.*, 430, 3187-3195 (2013)

• Nuñez, P., Holmes, R., Kieda, D. & LeBohec, S., "Imaging sub-milliarcsecond stellar features with intensity interferometry using air Cherenkov telescope arrays", accepted for publication by *MNRAS* 2012.

• Dravins, D., LeBohec, S., Jensen, H. & Nuñez, "Stellar Intensity Interferometry: Prospects for sub-milliarcsecond optical imaging", accepted for publication by *Instrumentation and Methods for Astrophysics (astro-ph.IM)*, 2012

• A. Abramowski et al., "The 2010 very high energy gamma-ray flare & 10 years of multi-wavelength observations of M 87", *ApJ*, 746, 2, 151 (2012)

• Dravins, D., LeBohec, S., Jensen, H. & Nuñez for the CTA consortium, "Optical Intensity Interferometry with the Cherenkov Telescope Array", accepted for publication by *Astroparticle Physics* for a special issue on the CTA project, 2012.

• D.E. Harris, et al., "An Experiment to Locate the Site of TeV Flaring in M87", accepted for publication in *Astroparticle Physics*, 2011

• Nuñez, P., Holmes, R., Kieda, D. & LeBohec, S., "Imaging capabilities of an Intensity Interferometer array", accepted for publication in *MNRAS*, 2011

• Nuñez, P., Vincent, S. & LeBohec, S., "Gamma-ray attenuation in X-ray binaries: an application to LSI+61303", *The Astrophysical Journal*, 731:105 (6pp), 2011 April 20

- Price, R., Vincent, S. & LeBohec, S., "Haar wavelets as a tool for the statistical characterization of variability", *Astroparticle Physics*, Volume 34, Issue 12, July 2011, Pages 871-877
- Vincent, S. & LeBohec, S., "Monte Carlo simulation of electromagnetic cascades in black hole magnetosphere", *MNRAS* (2010), 1256
- Acciari, V.A. et al., "VERITAS 2008-2009 Monitoring of the Variable Gamma-ray Source M 87", *Astrophysical Journal* 716 (2010) 819-824
- Acciari, V.A. et al., "The Discovery of Gamma-Ray Emission from the Blazar RGB J0710+591", *The Astrophysical Journal Letters*, Volume 715, pp. L49-L55 (2010)
- Acciari, V.A. et al., "Observations of the Shell-type Supernova Remnant Cassiopeia A at TeV Energies with VERITAS", *The Astrophysical Journal*, Volume 714, pp. 163-169 (2010)
- Acciari, V.A. et al., "Discovery of Variability in the Very High Energy Gamma-Ray Emission of 1ES 1218+304 with VERITAS", *The Astrophysical Journal Letters*, Volume 709, pp. L163-L167 (2010)
- Acciari, V.A. et al., "The discovery of gamma ray emission from a Starburst galaxy", *Nature*, Volume 462, pp. 770-772
- VERITAS Collaboration, VLBA 42GHz Monitoring Team, H.E.S.S. Collaboration and MAGIC Collaboration, 2009, "Radio Imaging of the Very High Energy Gamma ray emission region in the central engine of a Radio Galaxy", *Science*, 325, 444.
- Acciari, V.A. et al., 2009, "Multiwavelength Observations of the VHE Blazar 1ES 2344+514", submitted to *ApJ*
- Acciari, V.A. et al., 2009, "VERITAS Upper Limit on the VHE Emission from the Radio Galaxy NGC 1275" submitted to *ApJ*
- Acciari, V.A. et al., 2009, "Multiwavelength observations of a TeV-Flare from W Com" submitted to *ApJ*
- Acciari, V.A. et al., 2009, "Multiwavelength Observations of LS I +61 303 with VERITAS, Swift and RXTE", accepted for publication in *ApJ*
- Acciari, V.A. et al., 2009, "Simultaneous Multiwavelength Observations of Markarian 421 During Outburst", accepted for publication in *ApJ*
- Acciari, V.A. et al., *Astrophysical Journal*, 2009, on VERITAS observation of the supernova remnant Cas A
- Acciari, V.A. et al., *Astrophysical Journal*, 2009, on VERITAS observation of the super nove remnant IC443
- Acciari, V.A. et al., *Astrophysical Journal*, 2009, in preparation by Michelle Hui on her analysis of M87 observations with VERITAS
- P.Colin and S.LeBohec, 2009, "Optimization of large homogeneous Air Cherenkov Arrays and application to the design of a 1TeV-100TeV gamma ray observatory" 32, 5, 221.
- M. Schroedter, F. Krennrich, S. LeBohec, A. Falcone, S. Fegan, D. Horan, J. Kildea, A. Smith, J. Toner, T. Weekes, 2008, "Search for Primordial Black Holes with SGARFACE", *Astropart. Phys.* 31, 2, 102

- Acciari, V.A. et al., accepted for publication in ApJ, 2008, “VERITAS Observations of the BL Lac Object 1ES 1218+304”
- Acciari, V.A. et al., ApJL, 684, L73, (2008), “VERITAS Discovery of  $>200$  GeV Gamma-Ray Emission from the IBL W Comae”
- Acciari, V.A. et al., ApJL, 690, 2, L126, (2009). “Discovery of Very High Energy Gamma-ray Radiation from the BL Lac 1ES 0806+524”
- Acciari, V.A. et al., ApJ, 679,1, 397, (2008), “Observation of gamma-ray emission from the galaxy M87 above 250GeV wth VERITAS”
- Acciari, V.A. et al., ApJ, 679, 2, 1427 (2008), “VERITAS observations of the gamma-ray binary LS I +61 303”
- M. Wood et. al., ApJ, 678:594, 2008, “ A Search for Dark Matter Annihilation with the Whipple 10 m Telescope”
- G. Fossati et. al. ApJ 677, 906, 2007, , “Multiwavelength Observations of Markarian 421 in March 2001”
- Konopelko, A. et al., 2007, ApJ, 658, 1062. “Observations of the Unidentified TeV -Ray Source TeV J2032+4130 with the Whipple Observatory”
- Gliozzi, M. et. al., ApJ 2007, 646, 61, “Long-Term X-Ray and TeV Variability of Mrk 501”
- Holder, J. et al., 2006, Astropart.Phys., 25, 391 “The First VERITAS Telescope”
- LeBohec, S. and Holder, J., 2006, ApJ, 649, 399 “Optical Intensity Inerferometry with Atmospheric Cherenkov Telescope Arrays”
- Krawczynski, H et al., 2006, Astropartarticle Physics, 25, 380-390, “Gamma-Hadron Separation Methods for the VERITAS Array of Four Imaging Atmospheric Cherenkov Telescopes”
- Perkins, J., et al., 2006, ApJ in press “TeV Gamma-Ray Observations of the Perseus and Abell 2029 Galaxy Clusters”
- Gutierrez, K. et al., 2006, ApJ in press, “Multiwavelength Observations of 1ES 1959+650, One Year After the Strong Outburst of 2002”
- Rebillot et al., 2006, ApJ, 641, 740, “Multiwavelength Observations of Mrk 421”
- Fegan, S. J. et al., 2005, ApJ 624, 638, “A Survey of Unidentified EGRET Sources at Very High Energies”
- “A Multi-wavelength View of the TeV Blazar Markarian 421: Correlated Variability, Flaring, and Spectral Evolution”, M. Blazejowski et al., 2005, ApJ, 630, 130-141
- Daniel, M. et al., 2005, ApJ 621 181, “Spectrum of Very High Energy Gamma-Rays from the blazar 1ES1959+650 during Flaring Activity in 2002”
- S. LeBohec, C. Duke and P. Jordan, 2005, Astroparticle Physics, volume 24, issue 1-2, “Minimal Stereoscopic Analysis for Imaging Atmospheric Cherenkov Telescope Arrays”
- S. LeBohec, F. Krennrich and G. Sleege, Astroparticle Physics Volume 23, Issue 2 , March 2005, Pages 235-248, “SGARFACE: A Novel Detector For Microsecond Gamma-Ray Bursts”
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