

**Prof. Stefano Trillo**  
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2. **S. Trillo**, S. Wabnitz, B. Daino, *Ultrafast all-optical switching in optical fibers*, in "Nonlinear optics and Optical computing", edited by S. Martellucci and A.N. Chester (Plenum Press, New York, 1990), pp. 217-227.
3. M. Romagnoli, **S. Trillo**, S. Wabnitz, L. Zoccolotti, *Pulse dynamics in nonlinear couplers*, in "Nonlinear dynamics and quantum phenomena in optical systems", Springer Proceedings in Physics, vol. 55, edited by R. Vilaseca, and R. Corbalan (Springer, Berlin, 1991), pp. 214-216.
4. **S. Trillo**, S. Wabnitz, *Modulational polarization instabilities and disorder in birefringent optical fibers*, in "Nonlinearity with Disorder", Springer Proceedings in Physics, vol. 67, edited by F. Abdullaev, A.R. Bishop, and S. Pneumatikos (Springer, Berlin, 1992), pp. 269-281.
5. **S. Trillo**, S. Wabnitz, *Nonlinear dynamics and instability of coupled waves and solitons in optical fibers*, in "Anisotropic and nonlinear optical waveguides", edited by G.C. Someda, and G.I. Stegeman (Elsevier Publishers B.V., 1992), pp. 185-236.
6. **S. Trillo**, S. Wabnitz, *Nonlinear dynamics of parametric wave-mixing interactions in optics: instabilities and chaos*, in "Guided Wave Nonlinear Optics", edited by R. Reinisch and D. Ostrowski, (NATO ASI Series E: Applied Sciences, Kluwer Academic Publishers, Dordrecht, Germany, 1992), Vol. 214, pp. 489-534.
7. G. Millot, S. Pitois, E. Seve, P. Tchofo-Dinda, S. Wabnitz, **S. Trillo**, M. Haelterman, J. M. Soto Crespo, *Generation of high-repetition-rate dark soliton trains and frequency conversion in optical fibers*, in "New Trends in Optical Soliton Transmission Systems", edited by A. Hasegawa (Solid-State Science and Technology Library, Kluwer Academic Publishers, Dordrecht, 1998) Vol. 5, pp. 53-67.
8. **S. Trillo**, C. Conti, A. De Rossi, G. Assanto, *Recent Developments in the Theory of Optical Gap Solitons*, in "Optical Solitons: Theoretical Challenges and Industrial Perspectives", Vol. 12, Centre de Physique des Houches, edited by V. E. Zakharov and S. Wabnitz (EDP Sciences, Les Ulis; Springer-Verlag, Berlin, 1999); Lecture 13, pp. 233-248.

9. G. Millot, S. Pitois, E. Seve, P. Tchofo Dinda, P. Grelu, S. Wabnitz, M. Haelterman, **S. Trillo**, *Vector Modulational Instabilities and Soliton Experiments*, in "Optical Solitons: Theoretical Challenges and Industrial Perspectives", Vol. 12, Centre de Physique des Houches, edited by V. E. Zakharov and S. Wabnitz (EDP Sciences, Les Ulis; Springer-Verlag, Berlin, 1999); Lecture 14, pp. 249-263.
10. W. E. Torruellas, P. S. Jian, M. Haelterman, **S. Trillo**, F. Lederer, *Solitons in Cavities with Quadratic Nonlinearities*, in "Optical Solitons: Theoretical Challenges and Industrial Perspectives", Vol. 12, Centre de Physique des Houches, edited by V. E. Zakharov and S. Wabnitz (EDP Sciences, Les Ulis; Springer-Verlag, Berlin, 1999); Lecture 21, pp. 367-384.
11. G. Assanto, C. Conti, **S. Trillo**, *Quadratic Bragg solitons*, in "Soliton-driven Photonics", edited by A.D. Boardman and A.P. Sukhorukov, NATO Sciences Series, II Mathematics, Physics and Chemistry (Kluwer Academic Publishers, Dordrecht, 2001), Vol. 31, pp. 267-291.
12. C. Conti, **S. Trillo**, *Self-transparency and localization in gratings with quadratic nonlinearity*, in *Nonlinear Photonics Crystals*, edited by R.E. Slusher and B.J. Eggleton, Vol. 10, Series in "Photonics" (Springer-Verlag, Berlin, 2003), chapter 4, pp. 73-105.
13. **S. Trillo**, C. Conti, *Theory of gap solitons in short period gratings*, in *Optical solitons: theoretical and experimental challenges*, edited by K. Porsezian and V.C. Kuriakose, Vol. 613, Series "Lecture Notes in Physics" (Springer-Verlag, Berlin, 2003).
14. **S. Trillo**, A. Tonello, *Temporal solitons*, "Encyclopedia of Modern Optics", five volume-set; edited by B. Guenther, D. G. Steel, L. Bayvel (Elsevier, New York, 2004); Vol. 5, pages 72-81.
15. C. Conti, **S. Trillo**, *Nonlinear X waves*, in *Localized waves*, edited by E. Recami, M. Zamboni-Rached, and H.-E. Figueroa (Wiley, New York, 2008), pages 369. ISBN: 978-0-470-10885-7
16. C. Conti, P. Di Trapani, **S. Trillo**, *X waves in self-focusing of ultra-short pulses*, in *Self-focusing: Past and Present; Fundamental and Prospects*, R. W. Boyd, S. G. Lukishova, Y.R. Shen, editors (Springer, 2009); Series *Topics in Applied Physics*, Vol. 114, pages 299. ISBN: 978-0-387-32147-9.
17. M. Conforti, **S. Trillo**, *Dispersive shock waves: from water waves to nonlinear optics*, in *Rogue and shock waves in nonlinear dispersive media*, M. Onorato, S. Residori, F. Baronio, eds., Lecture Notes in Physics (Springer, Berlin, 2016). ISBN 978-3-319-39212-7.
18. **S. Trillo**, M. Conforti, *Wave-breaking and dispersive shock wave phenomena in optical fibers*, in *Shaping light in nonlinear optical fibers*, S. Boscolo and C. Finot, eds. (Wiley, March 2017), 504 pagg.
19. T. Hansson, A. Tonello, **S. Trillo**, S. Wabnitz, *Modulation instability, four-wave mixing and their Applications*, in *Shaping light in nonlinear optical fibers*, S. Boscolo and C. Finot, eds. (Wiley, March 2017).

20. M. Conforti, G. Xu, A. Mussot, A. Kudlinski, **S. Trillo**, *Observation of the rupture of a photon dam in an optical fiber*, in *Guided wave optics as a testbed for extreme waves*, ed. S. Wabnitz (IOP, 2017).
21. **S. Trillo**, M. Conforti, *Shock waves*, in *Handbook of Optical Fibers*, ed. G.-D. Peng (Springer, Singapore, 2018), pp 1-48.

## Conferences

### Invited contributions

1. E. Caglioti, **S. Trillo**, S. Wabnitz, *Hamiltonian stochasticity in the spatial evolution of polarization for birefringent optical fibers*, paper FA8, Technical Digest of the International Workshop on Instabilities, Dynamics, and Chaos in Nonlinear Optical Systems, July 8-10, 1987, Il Ciocco, Lucca, Italy, **invited paper**.
2. G.I. Stegeman, E.M. Wright, N. Finlayson, G. Assanto, W.C. Banyai, **S. Trillo**, S. Wabnitz, R.H. Stolen, *All-optical polarization switching in fibers*, Proceedings of the V National Symposium on Optical Fibers, Warsaw, Poland, Proc. Soc. Photo-Opt. Instrum. Eng. (SPIE), 1989, Vol. 1085, pp. 137-158, **invited paper**.
3. S. Wabnitz, **S. Trillo**, *Polarization instabilities and all-optical switching in waveguides*, Digest of the "Nonlinear Guided Waves Phenomena: Physics and Applications" (NLGW) Topical Meeting, Houston, TX, Feb. 2-4, 1989, pp. 198-201, paper FD1, **invited paper**.
4. G.I. Stegeman, C.T. Seaton, N. Finlayson, E.M. Wright, C.N. Ironside, **S. Trillo**, S. Wabnitz, *All-optical switching in waveguides*, Tech. Digest of the Integrated Optics and Optical Fiber Communication (IOOC) Conference, Kobe, Japan, July 18-21, 1989, **invited paper**.
5. **S. Trillo**, S. Wabnitz, *Instabilità di polarizzazione e commutazione in fibra ottica*, Atti del 1 Convegno Nazionale sulle Tecniche Fotoniche per l'Informazione, Santa Margherita Ligure, Marzo 1989, pp. 195-200, **memoria invitata**.
6. **S. Trillo**, *Instabilities and solitons in parametric amplification and oscillation*, International Workshop on "Mathematical Problems of Superfluidity and Nonlinear Optics", Technion, Haifa (Israel), May 27-June 3, 1996, **invited lecture**.
7. G. I. Stegeman, R. Fuerst, D. Baboiu, M. Canva, G. Assanto, **S. Trillo**, C. Bosshard, P. Gunter, B. Lawrence *Progress in quadratic solitons*, Optical Society of America (OSA) Annual Meeting, Long Beach, California, Oct. 12-17, 1997, paper MD1, **invited paper**.
8. **S. Trillo**, *Parametric gap solitons*, Workshop on Novel Solitons and Nonlinear Periodic Structures, Victoria, Canada, April 1-3, 1998, paper WMA4, **invited lecture**.
9. M. Haelterman and **S. Trillo**, *Dark solitary waves in optical parametric oscillators*, I Euro-conference "Patterns in Optical Systems" (PINOS), Alicante, Spain, May 21-23, 1998, p. 20, **invited lecture**.
10. **S. Trillo**, *Recent achievements in optical gap soliton theory*, International Congress on Industrial and Applied Mathematics (ICIAM), Mini-Symposium MSP-055 "Beam and Pulse Propagation", Edinburgh (UK), 5-9 July, 1999, **invited paper**.
11. G. Millot, E. Seve, **S. Trillo**, S. Wabnitz, *Frequency Conversion and switching in birefringent fibers*, Nonlinear Guided Waves and their Applications (NLGWA) Topical Meeting, Dijon, France, September 1-3, 1999, **invited paper** ThC1, pp. 248-251.

12. **S. Trillo**, C. Conti, G. Assanto, *Modeling and understanding localized nonlinear waves in photonic bandgap structures*, Tech. Digest of Conference on Lasers and Electro-Optics (CLEO), Long Beach, May 19-24, 2002, **invited paper** CTuT3, pp. 279-280.
13. **S. Trillo**, C. Conti, P. Di Trapani, O. Jedrkiewicz, J. Trull, G. Valiulis, *Nonlinear X-waves: a new perspective for space-time localization*, Nonlinear Guided Waves and their Applications (NLGWA) OSA Topical Meeting, Stresa, Italy, Sept 1-4, 2002, **invited paper** NLMB.
14. **S. Trillo** *Space-time coupling and localization through X-like waves in nonlinear optics*, OSA Annual Meeting, Orlando, Florida, Sept 30-Oct 3, 2002, **invited paper**.
15. P. Di Trapani, J. Trull, O. Jedrkiewicz, G. Valiulis, C. Conti, **S. Trillo**, A. Piskarskas, *Nonlinear X waves: a spontaneous localization in spatio-temporal domain*, IEEE-LEOS (Laser and Electro-Optics Society) Annual meeting 2002, 10-14 November 2002, Glasgow, **invited paper**.
16. P. Di Trapani, G. Valiulis, A. Piskarskas, O. Jedrkiewicz, J. Trull, **S. Trillo**, C. Conti, A. Matijosus and M. A. Porras, *X waves: a spatio-temporal localization connecting nonlinear and linear optics*, Nonlinear and transverse optics, Symposium of the German Physical Society, march 24, 2003, Hannover, **invited paper**.
17. P. Di Trapani, G. Valiulis, A. Piskarskas, O. Jedrkiewicz, J. Trull, **S. Trillo**, C. Conti, *The hunt for light bullets and the spontaneous X waves in nonlinear optics*, European Quantum Electronic Conference, june 22-27, 2003, Munich, Germany, **invited paper** (ref. EE11230).
18. **S. Trillo**, G. Millot, C. Conti, *Nonlinear dynamics induced by optical shocks*, European Quantum Electronic Conference, june, 12-17, 2005, Munich, Germany, **invited paper**.
19. **S. Trillo**, C. Conti, *Nonlinear X waves*, special symposium "Self-focusing: past and present" (R. Boyd, organizer), International Quantum Electronic Conference, july, 11-15, 2005, Toshi Center, Kaikan, Japan, **invited paper**.
20. **S. Trillo**, *Instabilities and soliton generation driven by collisionless shocks*, IPSSO, international workshop on Instabilities, Patterns and Spatial Solitons, Supelec, Metz (France), 28-30 March 2007, **invited paper**.
21. **S. Trillo**, C. Conti, A. Fratolocchi, G. Ruocco, *Dynamics of dispersive shock waves in local and nonlocal optical media*, Nonlinear phenomena in degenerate quantum gases, Conference organized by UCLM (Univesidad de Castilla-La Mancha), Toledo (Spain), 1-4 April 2008, **invited paper**. <http://matematicas.uclm.es/nlqugas08>
22. **S. Trillo**, *Dynamics and thermodynamics of optical dispersive shocks and soliton gas*, International Conference "Nonlinear waves: theory and applications", Beijing, China, June 9-12, 2008.
23. **S. Trillo**, *Optical shock waves and soliton gas*, Discrete Optics Workshop, TEDA Applied Physics School, Nankai University, Tiajin, China, June 12-13, 2008; **invited talk**.
24. G. Bellanca, **S. Trillo**, L. Stabellini, W. Lu, A. De Rossi, T. Antoni, M. Carras, *Accurate modelling of Quantum Well Infrared Photodetectors*, 8th International Conference on NUMerical Simulation of Optoelectronic Devices (NUSOD), Nottingham (UK), Sept. 1-4, 2008; **invited paper**.



25. **S. Trillo**, A. Fratallocchi, C. Conti, *Spatial dispersive shock waves in nonlinear optics*, Conference "Nonlinear Evolution Equations and Dynamical Systems" (NEEDS), Isola Rossa, Sardinia, Italy, May 16-23, 2009; **invited paper**
26. **S. Trillo**, *Dispersive shock waves: from predictions to experiments*, Conference "Nonlinear Evolution Equations and Dynamical Systems" (NEEDS), miniworkshop MW4, "Dispersive shock waves: mathematical and physical aspects" Kolymbari, Crete, Greece, July 8-15, 2012; **invited review lecture**
27. **S. Trillo**, *Dispersive shock waves in nonlinear optics*, International workshop "Nonlinear Schrödinger Equation: Theory and Applications", Heraklion, Greece, May 20-24, 2013, **invited talk**
28. **S. Trillo**, M. Conforti, F. Baronio, *Nonlinear waves emitting resonant radiation: new scenarios* The Third International Conference: Nonlinear Waves - Theory and Applications, Minisymposium "Nonlinear Optical Waves and Novel Phenomena", Beijing, June 12-15, 2013, **invited paper**.
29. **S. Trillo**, *Optical dispersive shock waves in parametric wave mixing*, The Third International Conference: Nonlinear Waves - Theory and Applications, Minisymposium "Dispersive Nonlinear Vector Waves: Solitons and Shocks", Beijing, June 12-15, 2013, **invited paper**.
30. **S. Trillo**, *Radiating Dispersive Shock Waves*, The Nonlinear Meeting, May 17-21, 2014, Edinburgh, UK, **invited talk**.
31. **S. Trillo**, *Resonant Radiation shed by Optical Dispersive Shock Waves*, International Workshop on Nonlinear Waves and Integrable Systems in Sicily, Baia Taormina, June 8-13, 2014; **invited talk**.
32. S. Malaguti, G. Bellanca, **S. Trillo**, *Ultracompact photonic crystal integrated circuits: connecting tiny devices to achieve high-performances*, ECIO, Nice, France, June 24-27, 2014; **invited paper**
33. G. Xu, J. Garnier, **S. Trillo**, B. Kibler, G. Millot, P. Suret, S. Randoux, S. Picozzi, *Temporal Dynamics of Incoherent Nonlinear Waves*, Nonlinear Photonics, Barcelona, Spain, July 27-31, 2014; **invited paper** NW2A.1
34. **S. Trillo**, *Wave-breaking and radiation effects in broadband multiple four-wave mixing*, Intl. Workshop "Rogue waves, dissipative solitons, plasmonics, supercontinuum, and special fibres", The Institute of Photonic Sciences (ICFO), Castelldefels (Barcelona), July 25-26, 2014; **invited paper**
35. A. Mussot, M. Droques, M. Conforti, X. Wong, D. Bigourd, K. Wong, G. Bouwmans, M. Douay, L. Bigot, Y. Quiquempois, **S. Trillo**, G. Martinelli, A. Kudlinski, *Topographic optical fibers : New Perspectives in Guided Optics*, Asia Communications and Photonics Conference (ACPC), Shanghai, China, November 11-14, 2014; **invited paper** ATh4C.3.
36. A. Kudlinski, M. Conforti, A. Bendhamane, F. Copie, F. Braud, S. Wang, S. Rota Nodari, G. Dujardin, S. De Bièvre, **S. Trillo**, A. Mussot, *Topographic optical fibers : a new degree of freedom in nonlinear optics*, Asia Communications and Photonics Conference (ACPC), Hong Kong, China, November 19-23, 2015; **invited paper** AS4C.1.

37. S. Trillo, *Shock Waves in dispersive systems: a survey of recent experimental results*, **Keynote talk**, Dispersive Hydrodynamics: The Mathematics of Dispersive Shock Waves and Applications, BIRS, Banff, Alberta, Canada, May 17-22, 2015.
38. **S. Trillo**, *Dispersive breaking of waves: hydrodynamics versus optics*, Workshop on Abnormal Wave Events (W-AWE), Nice, France, June 15-17, 2016, **invited talk**.
39. H. Louis, E. Louvergneaux, V. Odent, M. Conforti, **S. Trillo**, *Shock wave dynamics of light propagating in focusing Kerr-like nematic liquid crystals*, Nice Optics 2016, 1st int. conference on optics, photonics, and materials, Nice, France, oct 26-28, 2016, **invited talk**.
40. M. Conforti, F. Copie, A. Kudlinski, A. Mussot, **S. Trillo**, *Parametric resonance in modulated passive fiber cavities*, Nice Optics 2016, 1st int. conference on optics, photonics, and materials, Nice, France, oct 26-28, 2016, **keynote speaker**.
41. R. Morandotti, B. Wetzell, D. Bongiovanni, M. Kues, Y. Hu, Z. Chen, **S. Trillo**, J. M. Dudley, S. Wabnitz, *Inviscid Burgers Equation and Riemann Waves in Optics*, Photonics and Fiber Technology 2016 (ACOFT, BGPP, NP), 2016, Sydney, Australia, sept 5-8, 2016; George Stegeman Memorial Session (NT5A), **invited paper** NT5A.3.
42. B. Wetzell, D. Bongiovanni, M. Kues, Y. Hu, Z. Chen, **S. Trillo**, J. M. Dudley, S. Wabnitz, R. Morandotti, *The Inviscid Burgers Equation in Nonlinear Fiber Optics*, Frontiers in Optics 2016, Rochester, USA, oct 17-21, 2016, **invited paper** FTu3I.1.
43. A. Mussot, M. Conforti, G. Bouwmans, **S. Trillo**, A. Kudlinski, *Progress in Non-linear Topographic Optical Fibers* IEEE Photonics Conference (IPC), Orlando (FL), oct 1-5, 2017, **invited paper**.
44. G. Xu, M. Conforti, A. Kudlinski, A. Mussot, **S. Trillo**, *Dispersive Hydrodynamic Dam-Break Flow in Optical Fibers* PIERS (Progress in Electromagnetic Research Symposium), Singapore, nov 19-22, 2017, **invited paper**.
45. A. Mussot, C. Naveau, P. Szriftgiser, F. Copie, A. Kudlinski, M. Conforti, **S. Trillo**, *Non-destructive phase and intensity distributed measurements of the nonlinear stage of modulation instability in optical fibers* SPIE Photonics West LASE, San Francisco, jan 27 - Feb 1, 2018, paper 10517-14, **invited**.
46. A. Mussot, P. Szriftgiser, C. Naveau, M. Conforti, A. Kudlinski, F. Copie, **S. Trillo**, *Full characterization in phase and amplitude of the Fermi-Pasta-Ulam recurrence process in optical fibers* ICLO (Int. Conf. on Laser Optics) 2018, St. Petersburg, Russia, june 4-8, 2018, **invited**.
47. M. Conforti, G. Xu, C. Mas Arab, T. Marest, A. Bendahmane, A. Kudlinski, A. Mussot, **S. Trillo**, *Dispersive shock waves in optical fibers*, Days on Diffraction, St. Petersburg, Russia, june 4-8, 2018, **invited**.
48. **S. Trillo**, A. Mussot, M. Conforti, F. Copie, C. Naveau, A. Kudlinski, *The dispersive Riemann problem in nonlinear fiber optics* SIAM Nonlinear Waves and Coherent Structures, Anaheim, june , 2018, **invited**.
49. **S. Trillo**, *Dispersive Riemann problems and shock waves in optical fibers* Workshop and summer school "Nonlinear Photonics", Novosibirsk, aug. 21-24, 2018, **invited**.

50. A. Bendahmane, G. Xu, A. Kudlinski, A. Mussot, M. Conforti, **S. Trillo**, *Dispersive decay of discontinuous pulses in optical fibers*, Dynamics Days Europe 2018, sept. 3-7, Loughborough, UK, **invited**.
51. **S. Trillo**, *Modulational Instability: an endless story*, ETNO, Iseo, 2018, **invited**.
52. A. Mussot, C. Naveau, F. Bessin, P. Szriftgiser, M. Conforti, A. Kudlinski, **S. Trillo**, *New Insights on Modulation Instability in Optical Fibers*, OFC, San Diego, 3-7 March 2019, **invited**.
53. **S. Trillo**, *Nonlinear PDEs describing real experiments: recurrences, solitons, and shock waves*, The 11th IMACS Int. Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Athens, Georgia, April 17-19, 2019, **keynote speaker**.
54. **S. Trillo**, *Competing mechanisms of nonlinear modulation instability*, Waves Cote d'Azur, Nice, june 4-7, 2019, **invited**.
55. **S. Trillo**, C. Naveau, P. Szriftgiser, M. Conforti, A. Kudlinski, F. Copie, S. Li, G. Biondini, A. Mussot, *Nonlinear stage of modulational instability*, Progress In Electromagnetic Research Symposium (PIERS) Conference, Rome, june 16-19, 2019, **invited**.
56. **S. Trillo**, C. Naveau, P. Szriftgiser, M. Conforti, A. Kudlinski, F. Copie, A. Mussot, *Nonlinear Modulational Instability: Recurrences, Broken Symmetry, and Breathers*, Nonlinear Optics, Hawaii, USA, july 16-19, 2019, **invited**.
57. A. Mussot, A. Kudlinski, M. Conforti, F. Copie, F. Bessin, **S. Trillo**, *Topographic fibers: a platform for fundamental physical phenomena*, Optics at the Nanoscale (ONS), Anacapri, Italy, 9-11 sept., 2019, **invited**.
58. **S. Trillo**, G. Vanderhaegen, C. Naveau, P. Szriftgiser, A. Kudlinski, M. Conforti, and A. Mussot, *Nonlinear stage of modulational instability: towards a global understanding*, ICLO, st. Petersburg, june 8-12, 2020, **invited**.
59. **S. Trillo**, *From the Riemann problem to the focusing catastrophe: observations in nonlinear optics*, Workshop HY2W05 "Physical Applications, Program "Dispersive Hydrodynamics", Isaac Newton Institute for Mathematical Sciences, Cambridge, UK, dec. 5-9, 2022, **plenary talk**.  
<https://www.newton.ac.uk/event/hy2w05/>

### Contributed papers

60. R. Barbini, G. Vignola, S. Trillo, A. Cattoni, B. Dulach, C. Sanelli, S. De Simone, S. Guiducci, C. Marchetti, M. Preger, and M. Serio, *The LELA undulator: main features and performances*, J. Phys. Colloques, Vol. **44**, C1-365 (1983); Bendor Free Electron Laser Conference, 26/6-1/7/1983, Bendor, France;
61. M. Biagini, **S. Trillo**, et al., *Gain measurement and optimization of the energy extraction from the electrons of the Frascati-ADONE FEL*, Proceedings of the Conference on "Free-Electron Generators of Coherent Radiation", 26/6-1/7/83, Orcas Island, Washington, Proc. Soc. Photo-Opt. Instrum. Eng. (SPIE) vol. 453, pp. 275-282, (1984).

62. B. Crosignani, **S. Trillo**, P. Di Porto, S. Wabnitz, *Nonlinear ellipse rotation in a low-birefringence optical fiber*, Proceedings No. 383 AGARD Conference, Instambul, Turkey, Sept. 1985.
63. **S. Trillo**, S. Wabnitz, R.H. Stolen, G. Assanto, G.I. Stegeman, *Observation of polarization self-switching in a birefringent fiber*, J. of Optical Soc. Am. B 3(8), Agosto 1986; Proc. XV International Quantum Electronics Conference (IQEC), San Francisco, June 9-13, 1986.
64. **S. Trillo**, S. Wabnitz, B. Crosignani, P. Di Porto, *Nonlinear degenerate four-wave mixing in a birefringent optical fiber: phase conjugation and spatial instabilities*, Proceedings of the O-E LASE '87 and Electro-Optic Imaging Systems and Devices Symposium, January 11-16, 1987, Los Angeles, USA, Proc. Soc. Photo-Opt. Instrum. Eng. (SPIE) Vol. 739, pp. 11-21, 1987.
65. E. Caglioti, **S. Trillo**, S. Wabnitz, *Spatial stochastic instability in nonlinear optical media*, Proceedings of International Conf. on the Physics of Chaos and System Far from Equilibrium, Monterey, January 11-14, 1987, published in Nuclear Physics B, 2 590 (1987).
66. A. Mecozzi, **S. Trillo**, S. Wabnitz, B. Daino, *Polarization instability and all-optical switching in periodically twisted fiber filters*, Digest of the XV International Quantum Electronics Conference (IQEC), Baltimore, 27/4 - 1/5/1987, paper WMM3; anche su J. Optical Soc. B. 4 (13), pp. 142-144, (1987).
67. **S. Trillo**, S. Wabnitz, *Nonreciprocal and stochastic all-optical switching in nonlinear coherent couplers*, Techn. Digest of the Conference on Lasers and Electro-Optics (CLEO), Baltimore, 27/4 -1/5/1987, paper ThK30.
68. E. Caglioti, **S. Trillo**, S. Wabnitz, B. Daino, G.I. Stegeman, *Power-dependent switching in a coherent nonlinear coupler in presence of saturation*, Digest of the 4th European Conference on Integrated Optics (ECIO), Glasgow, Scotland, May 11-13, 1987.
69. B. Daino, **S. Trillo**, S. Wabnitz, G.I. Stegeman, *Instabilities for all-optical switching in two-mode nonlinear waveguides*, Proceedings of the O-E LASE '87 and Electro-Optic Imaging Systems and Devices Symposium, San Diego, 1987, Proc. Soc. Photo-Opt. Instrum. Eng. (SPIE), Vol. 836, pp. 254-264 (1987).
70. A. Mecozzi, **S. Trillo**, S. Wabnitz, G.I. Stegeman, *All-optical limiting, thresholding and switching in a nonlinear DFB waveguide*, Technical Digest of the 13th European Conference on Optical Communication (ECOC), September 13-17, 1987, Helsinki, Finland, pp. 391-394.
71. G.I. Stegeman, E. Caglioti, **S. Trillo**, S. Wabnitz, *Parameter trade-offs in a directional coupler with two-level saturable nonlinearity*, Technical Digest of the 13th European Conference on Optical Communication (ECOC), September 13-17, 1987, Helsinki, Finland, pp. 25-28.
72. N. Finlayson, A. Gabel, K. DeLong, E. M. Wright, C.T. Seaton, G.I. Stegeman, **S. Trillo**, S. Wabnitz, L. Thylen, *Material trade-offs for nonlinear guided waves*, Technical Digest of the 13th European Conference on Optical Communication (ECOC), September 13-17, 1987, Helsinki, Finland, pp. 263-267.

73. E. Caglioti, **S. Trillo**, S. Wabnitz, *Spatial stochastic instabilities of nonlinear coupled modes: numerical results*, OPTICS '87, Optical Society of America (OSA) Annual Meeting, Rochester, New York, October 18-23, 1987.
74. G.I. Stegeman, E.M. Wright, N. Finlayson, R. Zanoni, C. Seaton, L. Thylen, S. Wabnitz, **S. Trillo**, Y. Silberberg, *Nonlinear all-optical guided-wave devices: operating characteristics and material trade-offs*, Proceedings of the International Symposium on the Technologies for Optoelectronics, Cannes, 1987, Proc. Soc. Photo-Opt. Instrum. Eng. (SPIE) Vol. 864, pp. 24-34 (1987).
75. **S. Trillo**, S. Wabnitz, *Modulational polarization instability in birefringent fibers*, Technical Digest of the Topical meeting on Optical bistability, Aussois, France, March 23-25, 1988, paper FB6, pp. 224-225.
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