

Publications by Arianna Borrelli:

Book:

- A. Borrelli, *Aspects of the astrolabe: 'architectonica ratio' in tenth- and eleventh-century Europe* (Stuttgart: Steiner Verlag, 2008)

Research papers in history and philosophy of science:

- A. Borrelli, "Glasinstrumente und Naturforschung bei Giovan Battista Della Porta: Ein Beispiel von „transverse regime“ der Wissensproduktion in der frühen Neuzeit?", in: Klaus Hentschel (Hg.), *Zur Geschichte der Forschungstechnologien. Generalität, Interstitialität & Transfer* (Diepholz: GNT-Verlag, 2012) 92–109
- A. Borrelli, "The case of the composite Higgs: the model as a "Rosetta stone" in contemporary high-energy physics", forthcoming in: *Studies in the History and Philosophy of Modern Physics*
- A. Borrelli, "Giovan Battista Della Porta's Neapolitan magic and his humanistic meteorology", in: Siegfried Zielinski and Eckhard Fürlüs (eds.), *Variantology 5. On Deep Time Relations of Arts, Sciences and Technologies* (Cologne: Walther König, 2011) 103–130
- A. Borrelli, "Angular momentum between physics and mathematics", in: Karl-Heinz Schlotte and Martina Schneider (eds.), *Mathematics Meets Physics* (Frankfurt a. M.: Verlag Harri Deutsch, 2011) 395–440
- A. Borrelli, "Die Reproduktion des Temperaturbegriffs", in: Ute Frietsch and Bettina Bock von Wulffingen (eds.), *Epistemologie und Differenz. Zur Reproduktion in den Wissenschaften* (Bielefeld: Transcript, 2010) 59–82
- A. Borrelli, "Dirac's bra-ket notation and the notion of a quantum state", in: Hermann Hunger, Felicitas Seebacher and Gerhard Holzer (eds.), *Styles of Thinking in Science and Technology. Proceedings of the 3rd International Conference of the European Society for the History of Science (Vienna 2008)* (2010) 361–371
- A. Borrelli, "Die bewegende Kraft des Feuers: Naturgeheimnisse und „nutzlose“ Technik in der Frühen Neuzeit", *Praxis der Naturwissenschaften* 4/59 (Juni 2010) 5–10
- A. Borrelli, "Crystallography in the making", in: Siegfried Zielinski and Eckhard Fürlüs (eds.), *Variantology 4. On Deep Time Relations of Arts, Sciences and Technologies in the Arabic-Islamic World and Beyond* (Cologne: Walther König, 2010) 53–86.
- A. Borrelli, "The emergence of selection rules and their encounter with group theory: 1913–1927", *Studies in the History and Philosophy of Modern Physics* 40 (2009) 327–337, <http://dx.doi.org/10.1016/j.shpsb.2009.05.002>
- A. Borrelli, "The weatherglass and its observers in the early seventeenth century", in: Claus Zittel, Gisela Engel, Nicole C. Karafyllis and Romano Nanni (eds.), *Philosophies of technology: Francis Bacon and its contemporaries*, vol. 1 (Leiden: Brill, 2008) 67–130 (Intersections 11/1)

- A. Borrelli, "Pneumatics and the alchemy of weather: What is wind and why does it blow?", in: Siegfried Zielinski and Eckhard Fürlus (eds.), *Variantology 3. On Deep Time Relations of Arts, Sciences and Technologies in China and elsewhere* (Cologne: Walther König, 2008) 27-72
- A. Borrelli, "The media perspective in the study of scientific abstraction", in: MediaArtHistoriesArchive, re:place Presentations, issued November 2007, accessioned Januar 2008, <http://193.171.60.44/dspace/handle/10002/455>
- A. Borrelli, "Force and its measure", in: MediaArtHistoriesArchive, re:place Background Texts, issued October 2007, <http://193.171.60.44/dspace/handle/10002/422>
- A. Borrelli, "The flat sphere", in: Siegfried Zielinski and David Link (eds.), *Variantology 2. On Deep Time Relations of Arts, Sciences and Technologies* (Cologne: Walther König, 2006) 145-166
- A. Borrelli, "Mathematical notation as a philosophical instrument", in: Siegfried Zielinski and Silvia M. Wagnermaier (eds.), *Variantology 1. On Deep Time Relations of Arts, Sciences and Technologies* (Cologne: Walther König, 2005) 279-296

Book reviews, lexica entries:

- A. Borrelli, Articles: "Wärmelehre", in: *Enzyklopädie der Neuzeit* 14 (Stuttgart: Metzler, 2011) col. 652-661
- A. Borrelli, Article: "Temperatur", in: *Enzyklopädie der Neuzeit* 13 (Stuttgart: Metzler, 2011) col. 534-536
- A. Borrelli, Il rapporto fra scienza e società nella storiografia della scienza e in L'Ape e l'Architetto, in: M. Cini, G. Ciccotti, M. De Maria, G. Jona Lasinio, M. Lippi, A. Borrelli, A. de Lillo, *L'Ape e l'architetto ripubblicato* (Florence: Franco Angeli, 2011) 261-274
- A. Borrelli, Review of: "Einstein's generation. The origins of the relativity revolution, by Richard Staley", *Isis* 101 (2010) 912-913
- A. Borrelli, Articles: "Bose-Einstein Statistics", "Quantum Statistics", "Renormalization", "Spin-Statistics Theorem", in: Friedel Weinert, Klaus Hentschel and Dan Greenberger (eds.), *Compendium of Quantum Physics. Concepts, Experiments, History and Philosophy* (Berlin: Springer 2009) 74-78, 611-612, 637-640, 733-736
- A. Borrelli, Review of: "Astrolabes and angels, epigrams and enigmas, by David A. King", *Berichte für Wissenschaftsgeschichte* 32 (2009) 109-110
- A. Borrelli, Review of: "Inventing temperature: Measurement and Scientific Progress, by Hasok Chang", *Ambix* 54 (2007) 100-101

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- A. Borrelli, P. Deforcrand, A. Galli, "Non-hermitian exact local bosonic algorithm for dynamical quarks", *Nuclear Physics B* 477 (1996) 809-832

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- C. Alexandrou, A. Borrelli, S. Güsken, F. Jegerlehner, K. Schilling, G. Siegert, R. Sommer, "Heavy-light baryonic mass splittings from the lattice", *Nuclear Physics* B (Proc. Suppl.) 42 (1995) 297–299
- C. Alexandrou, A. Borrelli, S. Güsken, F. Jegerlehner, K. Schilling, G. Siegert, R. Sommer, "Beautiful baryons from lattice QCD", *Physics Letters* B 337 (1994) 340–346
- G. J. van Oldenborgh, P. J. Franzini, A. Borrelli, "WWF: A generator for $e^+e^- \rightarrow 4$ fermions + γ ", *Computer Physics Communications* 83 (1994) 14–22
- A. Borrelli, C. Pittori, R. Frezzotti, E. Gabrielli, "New improved operators: a convenient redefinition", *Nuclear Physics* B 409 (1993) 382–396
- A. Borrelli, C. Pittori, "Improved renormalization constants for B decay and BBbar mixing", *Nuclear Physics* B 385 (1992) 502–524
- A. Borrelli, C. Pittori, "Improvement of lattice matrix elements involving heavy quarks", *Nuclear Physics* B (Proc. Suppl.) 26 (1992) 398–400
- A. Borrelli, L. Maiani, R. Sisto, "Physical parameters of the intermediate vector boson in the standard electroweak theory and the t-quark mass", *Rendiconti dell'Accademia dei Lincei*, IX,2 (1991) 5–13
- A. Borrelli, L. Maiani, R. Sisto, "Comparing the Z^0 mass and inclusive widths to the standard electroweak theory", *Physics Letters* B 244 (1990) 117–121
- A. Borrelli, M. Consoli, L. Maiani, R. Sisto, "Model independent analysis of the Z line shape in e^+e^- annihilation", *Nuclear Physics* B 333 (1990) 357–379
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- A. Borrelli, L. Maiani, G. C. Rossi, R. Sisto, M. Testa, "Yukawa lattice theory and non-perturbative upper bounds to the fermion mass", *Physics Letters* B 221 (1989) 360–362