TRiP 2015

Pictures and Proofs

Conference Announcement and Call for Papers Three Rivers Philosophy Conference at the University of South Carolina in cooperation with the BiCoDa Alliance (Bielefeld, Columbia, Darmstadt)

March 19 to 21, 2015 - Columbia, South Carolina

What are the roles of pictures and diagrams in mathematical proofs, in formal reasoning, and in epistemic justification more broadly?

Can pictures by themselves serve as arguments insofar as they can be persuasive and even convey a sense of demonstrative certainty?

For the most part, these questions have been discussed separately. We seek to bring them together and thereby take them in new directions. These are philosophical questions that are addressed by many different disciplines: STS, history of science, mathematics, engineering, media studies, and the visual arts. They draw attention to technologies of picturing, the contexts of practice in which proofs and procedures of formal reasoning are employed, and problems and methods of teaching and communication.

Plenary Speakers include (as of August 1, 2014)

James Robert Brown (Toronto) Gila Hanna (Toronto) Kenneth Manders (Pittsburgh) Laura Perini (Pomona)

We invite submissions on any aspect of the relation between pictures and proofs, and especially on these three thematic areas:

- 1) The role of pictures in logical or mathematical reasoning: What is the role of diagrams as objects of reasoning or as parts of the language of reasoning?
- 2) Compelling imagery and the power of visual evidence: Do pictures afford evidence and certainty such that they can serve as proofs?
- 3) Handling proofs and putting them to work: How have mechanical models, graphic procedures, visual and haptic manipulation contributed to mathematical reasoning in a wide variety of disciplines and applications?

Please submit by November 3, 2014, a 400 to 600 word abstract (no manuscript required) via EasyChair at <u>www.easychair.org/conferences/?conf=pandp2015</u> – The conference organizers are Tom Burke (burke@sc.edu), Alfred Nordmann (nordmann@phil.tu-darmstadt.de), Heike Sefrin-Weis (sefrinwe@mailbox.sc.edu). Further information will be posted at the conference website <u>http://artsandsciences.sc.edu/phil/content/trip2015</u>.