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| Code of course: **BMI-LOTD-308E.04,** BMA-LOTD-308.04 |
| Title of course: **Logic & Relativity** |
| Lecturers: **Judit Madarász, Gergely Székely** |
| **General aim of the course:** Getting some familiarity with the basic assumptions and fundamental concepts of special relativity from the point of view of logic and definability theory. **Content of the course**: Building up special relativity theory in first order logic: Axioms; Paradigmatic effects; Faster than light motion; Exploring the first-order logic conceptual structure (algebra of explicitly definable relations) of special relativistic and classical spacetimes.**Grading criteria, specific requirements:**  Grading is based on homework.**Required reading:**H. Andréka, J. X. Madarász, I. Németi and G. Székely:On Logical Analysis of Relativity TheoriesHungarian Phil. Review; 54 2010/4; 20, arXiv:1105.0885H. Andréka, J. X. Madarász, I. Németi and G. Székely:A logic road from special relativity to general relativitySynthese 186(3) pp. 633-469 (2012), arXiv:1005.0960v2**Suggested further reading:**Robert Goldblatt: Orthogonality and Spacetime Geometry, Springer-Verlag, 1987. |