Axiomatic Packet Geometry

WPC–WPO | Authorial scientific archive of I.B. Kurpishev · Geometry

HTML: /en/axiomatic-packet-geometry_en.html

PDF: /en/pdf/geometry/2026_kurpishev_axiomatic-packet-geometry_en.pdf

Editorial publication-ready version for the WPC–WPO site.

Subject of the article

Axiomatic packet geometry serves as the initial geometric framework of the WPC–WPO archive. In this article geometry is understood as a system of structural relations between packet objects, rather than only as a language of figures and metric measurements. The packet approach makes it possible to combine axiomatization, invariants, associator-oriented themes, and the internal organization of the space of admissible structures.

Axiomatic principle

The basic aim of the article is to move packet geometry from a set of images and heuristics to a strict system of definitions, hypotheses, and consequences. In such a system every packet object is considered together with its admissible operations, compatibilities, and constraints. Precisely this axiomatic level later allows one to pass to obstruction theory, deformations, rigidity, and the internal geometry of the moduli space.

Geometric language

For the WPC–WPO site this article serves as the entry point into the geometry catalog. Through it the reader should move toward the texts on quadratic obstruction, NAPG, associator rigidity, and also toward the more applied or popular geometric articles. For that reason the present publication-ready version pays special attention not only to content, but also to the place of the article within the general architecture of the archive.

Role in further development

Axiomatic packet geometry is important because it provides the common language for the transition from geometric description to deformation and moduli theory. Whenever one speaks of admissible structures, tangent spaces, obstructions, and rigidity, it is the axiomatic layer that preserves the unity of the program and prevents the strict mathematical core from being mixed with later physical interpretations.

Related archive articles

- Quadratic Obstruction — quadratic-obstruction_en.html
- NONASSOCIATIVE PACKET GEOMETRY — napg-monograph_en.html
- Associator and Rigidity — associator-rigidity_en.html

Other language versions

- RU: /ru/axiomatic-packet-geometry_ru.html
- EN: /en/axiomatic-packet-geometry_en.html

- DE: /de/axiomatic-packet-geometry_de.html
- ZH: /zh/axiomatic-packet-geometry_zh.html

All later versions should preserve cross-links to the WPC–WPO archive.

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