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Research fields

Mathematics

Differential Geometry

Information Geometry

Key Words

Statistical manifold

Kählerian manifold

Sasakian manifold

Their statistical submersions

Subject of research on Data Science :

Fundamental research on “XX” using
information geometry and its application.

For example, “XX” is “probability
distribution” or “time series”, etc.

1. [Kazuhiko Takano](#), Geometric properties of system spaces of auto-regressive process of degree 1. preprint.
2. [Kazuhiko Takano](#), Aliya Naaz Siddiqui and Ali Hussain Alkhaldi, On Hessian statistical submersions, submitted.
3. [Kazuhiko Takano](#), Adela Mihai, Ion Mihai and Mohammad Hasan Shahid, Invariant holomorphic statistical submersions, submitted.
4. Alexandru Ciobanu, Adela Mihai and [Kazuhiko Takano](#), Casorati curvatures for statistical and Hessian submersions, accepted by Facta Universitatis, Series : Mathematics and Informatics.
5. [Kazuhiko Takano](#), On φ -invariant Sasaki-like statistical submersions, Romanian Journal of Mathematics and Computer Science, 15 (2), 18-45, 2025.
6. [Kazuhiko Takano](#) and Sema Kazan, Statistical submersions with parallel almost complex structures, Mediterranean Journal of Mathematics, 21:109, 2024.
7. Esra Erkan, [Kazuhiko Takano](#) and Mehmet Gülbahar, Locally product-like statistical manifolds and their hypersurfaces, International Electronic Journal of Geometry, 16 (2), 435-450, 2023.
8. [Kazuhiko Takano](#), Esra Erkan and Mehmet Gülbahar, Locally product-like statistical submersions, Turkish Journal of Mathematics, 47 (2), 846-869, 2023.
9. Sema Kazan and [Kazuhiko Takano](#), Anti-invariant holomorphic statistical submersions, Results in Mathematics, 78 (4), 2023.