PRINCIPLES OF MODERN MATHEMATICAL WRITING

PETRO KOLOSOV

1. Principles

- Consistency A manuscript should be open accessible online for long time archiving repository.
- Integrity A manuscript should be based on existing well-developed research, fulfilling the complete big picture.
- Visibility A manuscript should be easily discoverable online. That includes SEO optimization, proper category keywords, SMM.
- Observability Means gathering analytics data and metrics of a manuscript. For example Google Analytics website integration.
- Transparency The source code of a manuscript should be freely available online on GitHub or other version control hosting.
- **Testability** Original results of a manuscript, or complicated claims (formulae) should be tested using mathematical software (Mathematica, PARI/GP, MATLAB).
- Modularity Formulae, plots and tables should be arranged in a such way that it is easy to reuse them in other manuscripts.
- **Productivity** Time taken for setup and configuration of LATEX, editors, plugins, CI/CD should be minimized by using automation approaches.

Date: July 8, 2025.