Syllabus for the seminar
"Logarithmic Geometry" 0366-4349
(2023-24, Spring semester)

Prof. E. Shustin


(2) **Sheaves of Monoids:** Monoidal spaces. Charts and coherence.

(3) **Logarithmic Schemes:** Log structures and log schemes. Morphisms of log schemes.

(4) **Differentials and Smoothness:** Derivations and differentials. Thickenings and deformations. Logarithmic smoothness. Logarithmic flatness.

(5) **Betti and de Rham Cohomology:** Betti realizations of log schemes. The de Rham complex. Analytic de Rham cohomology. Algebraic de Rham cohomology

**Prerequisites:** Algebra B-3, Algebraic Geometry I, II

**Bibliography:**