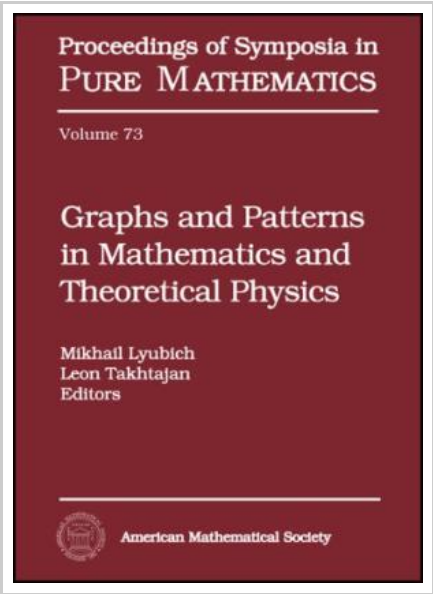




# Graphs and Patterns in Mathematics and Theoretical Physics

By Mikhail Lyubich, Leon Takhtajan

American Mathematical Society. Hardback. Book Condition: new. BRAND NEW, Graphs and Patterns in Mathematics and Theoretical Physics, Mikhail Lyubich, Leon Takhtajan, The Stony Brook Conference, 'Graphs and Patterns in Mathematics and Theoretical Physics', was dedicated to Dennis Sullivan in honor of his sixtieth birthday. The event's scientific content, which was suggested by Sullivan, was largely based on mini-courses and survey lectures. The main idea was to help researchers and graduate students in mathematics and theoretical physics who encounter graphs in their research to overcome conceptual barriers. The collection begins with Sullivan's paper, 'Sigma models and string topology', which describes a background algebraic structure for the sigma model based on algebraic topology and transversality. Other contributions to the volume were organized into five sections: Feynman Diagrams, Algebraic Structures, Manifolds: Invariants and Mirror Symmetry, Combinatorial Aspects of Dynamics, and Physics.These sections, along with more research-oriented articles, contain the following surveys: 'Feynman diagrams for pedestrians and mathematicians' by M. Polyak, 'Notes on universal algebra' by A. Voronov, 'Unimodal maps and hierarchical models' by M. Yampolsky, and 'Quantum geometry in action: big bang and black holes' by A. Ashtekar. This comprehensive volume is suitable for graduate students and research mathematicians interested in graph theory...



### Reviews

*Extensive information! Its this type of excellent study. I have read and i am sure that i will gonna go through yet again once more down the road. Once you begin to read the book, it is extremely difficult to leave it before concluding.*

-- ***Aliyah Mayer***

*It is great and fantastic. Yes, it really is engage in, nevertheless an amazing and interesting literature. You can expect to like how the author write this pdf.*

-- ***Roma Prohaska MD***