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Nota di contenuto	-- AI and LLM. -- Using Large Language Models to Automate Annotation and Part-of-Math Tagging of Math Equations. -- Automated Mathematical Discovery and Verication: Minimizing Pentagons in the Plane. -- Using General Large Language Models to Classify Mathematical Documents. -- Proof Assistants. -- Chaining extensionality lemmas in Lean’s Mathlib. -- A formalization of all notions in the statement of a theorem by Deligne. -- Formalizing Finite Ramsey Theory in Lean 4. -- Formalizing Pick’s Theorem in Isabelle/HOL. -- Formalizing Coppersmith’s Method in Isabelle/HOL.

-- Incorporating a database of graphs into a proof assistant. -- Logical Frameworks and Transformations. -- Reusing Learning Objects via Theory Morphisms. -- Transforming Optimization Problems into Disciplined Convex Programming Form. -- A Logical Framework Perspective on Conservativity. -- Knowledge Representation and Certication. -- Towards Semantic Markup of Mathematical Documents via User Interaction. -- Evaluation and Domain Adaptation of Similarity Models for Short Mathematical Texts. -- Generating Formally Veried Quantum Fourier Transform Algorithms. -- Proof Search and Formalization. -- Partial proof terms in the study of idealized proof search. -- A Framework for Formal Probabilistic Risk Assessment using HOL Theorem Proving. -- Solving Hard Mizar Problems with Instantiation and Strategy Invention. -- System Descriptions. -- Remote Verication System for Mizar Integrated with Emwiki. -- Oruga: Implementation and Use of Representational Systems Theory. -- HOL4PRS: Proof Recommendation System for the HOL4 Theorem Prover.

Sommario/riassunto

This book constitutes the refereed proceedings of the 17th International Conference on Intelligent Computer Mathematics, CICM 2024, held in Montréal, Québec, Canada, during August 5–9, 2024. The 21 full papers presented were carefully reviewed and selected from 28 submissions. These papers have been categorized into the following sections: AI and LLM; Proof Assistants; Logical Frameworks and Transformations; Knowledge Representation and Certication; Proof Search and Formalization & System Descriptions.