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Soggetti	Programming languages (Electronic computers) Mathematical logic Artificial intelligence Computer logic Algorithms Programming Languages, Compilers, Interpreters Mathematical Logic and Foundations Artificial Intelligence Mathematical Logic and Formal Languages Logics and Meanings of Programs Algorithm Analysis and Problem Complexity
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Nota di contenuto	Linear Ramified Higher Type Recursion and Parallel Complexity -- Reflective ?-Calculus -- A Note on the Proof-Theoretic Strength of a Single Application of the Schema of Identity -- Comparing the Complexity of Cut-Elimination Methods -- Program Extraction from Gentzen's Proof of Transfinite Induction up to ?0 -- Coherent Bicartesian and Sesquicartesian Categories -- Indexed Induction-Recursion -- Modeling Meta-logical Features in a Calculus with Frozen Variables -- Proof Theory and Post-turing Analysis -- Interpolation for Natural Deduction with Generalized Eliminations -- Implicit Characterizations of Pspace -- Iterate logic -- Constructive Foundations for Featherweight Java.

Sommario/riassunto	Proof theory has long been established as a basic discipline of mathematical logic. It has recently become increasingly relevant to computer science. The - ductive apparatus provided by proof theory has proved useful for metatheoretical purposes as well as for practical applications. Thus it seemed to us most natural to bring researchers together to assess both the role proof theory already plays in computer science and the role it might play in the future. The form of a Dagstuhl seminar is most suitable for purposes like this, as Schloß Dagstuhl provides a very convenient and stimulating environment to - scuss new ideas and developments. To accompany the conference with a proc- dings volume appeared to us equally appropriate. Such a volume not only ?xes basic results of the subject and makes them available to a broader audience, but also signals to the scienti?c community that Proof Theory in Computer Science (PTCS) is a major research branch within the wider ?eld of logic in computer science.