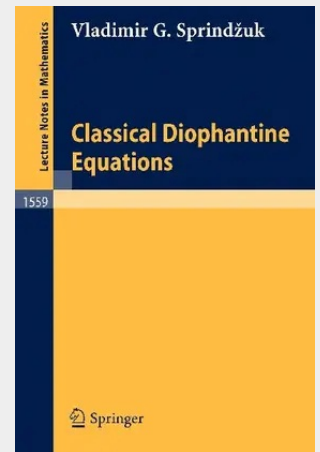


Classical Diophantine Equations

The author had initiated a revision and translation of "Classical Diophantine Equations" prior to his death. Given the rapid advances in transcendence theory and diophantine approximation over recent years, one might fear that the present work, originally published in Russian in 1982, is mostly superseded. That is not so. A certain amount of updating had been prepared by the author himself before his untimely death. Some further revision was prepared by close colleagues. The first seven chapters provide a detailed, virtually exhaustive, discussion of the theory of lower bounds for linear forms in the logarithms of algebraic numbers and its applications to obtaining upper bounds for solutions to the eponymous classical diophantine equations. The detail may seem stark-- the author fears that the reader may react much as does the tourist on first seeing the centre Pompidou; notwithstanding that, Sprindžuk maintains a pleasant and chatty approach, full of wise and interesting remarks. His emphases well warrant, now that the book appears in English, close study and emulation. In particular those emphases allow him to devote the eighth chapter to an analysis of the interrelationship of the class number of algebraic number fields involved and the bounds on the heights of the solutions of the diophantine equations. Those ideas warrant further development. The final chapter deals with effective aspects of the Hilbert Irreducibility Theorem, harkening back to earlier work of the author. There is no other congenial entry point to the ideas of the last two chapters in the literature.

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