

Classification and complexity problems for separable Banach spaces

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The world of separable Banach spaces is nothing but a wild jungle, and it's not easy to find one's way in there! In this talk, I will discuss (very partial) answers given in the last few decades to questions such as: how to classify separable Banach spaces? What are the simplest ones? Which properties separate the classical spaces from the exotic ones? I'll also explain how methods from combinatorics and descriptive set theory can be useful in answering those questions.