# Applications of PPC-fractions and Szegő polynomials to frequency analysis

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The frequency analysis problem consists of determining unknown frequencies (possibly anharmonic) from a signal consisting of the superposition of sinusoidal waves using a sample of observed data at equal intervals of time. Much work has been published on the mathematical theory of positive Perron-Caratheodory continued fractions (PPC-fractions) and Szegő polynomials and their application to frequency analysis. This talk explores applications of this theory to specific examples of frequency analysis, illustrating the effectiveness of the method and its limitations.