

Quantization: an overview  
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The term quantization stems from electrical engineering where it refers to the process of approximating a signal on the basis of a discrete/finite representation. We review the origins of the theory and then quickly come to progress made in the past twenty years. We consider finite dimensional as well as infinite dimensional signals. A particular focus is laid on asymptotic formulas for the best-achievable  $L^p$ -error under a support constraint for the approximating signal, so called high-resolution formulas.