# Some new approaches to Bernstein and completely monotone functions, and some consequences

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We present some new approaches to, and examples of, Bernstein and completely monotone functions, and consider their role in the construction of moment sequences and subnormal and moment infinitely divisible ($\mathcal{MID}$) weighted shifts on Hilbert space. We show as well that the $\mathcal{MID}$ shifts, although a subset of the subnormal weighted shifts, are in a natural one-to-one correspondence with the subnormal shifts.

This talk is based on joint work with Chafiq Benhida (Université des Sciences et Technologies de Lille, France) and Raúl E. Curto (University of Iowa, USA).