Pierre-Antoine Bernard, Nicolas Crampe and Luc Vinet* (vinet@crm.umontreal.ca). An explanation of the commuting operator "miracle" in time and band limiting.

Time and band limiting operators are expressed as functions of the confluent Heun operator arising in the spheroidal wave equation. Explicit formulas are obtained when the bandwith parameter is either small or large and results on the complete Fourier transform are recovered. (Received January 16, 2022)