



# Hamilton Institute

## **EPT functions: Non-negativity analysis, Levy processes and Financial applications**

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UCC

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### **Abstract:**

Exponential Polynomial Trigonometric (EPT) functions are being considered as probability density functions. A specific matrix-vector representation is proposed for doing calculations with these functions. We investigate when these functions are non-negative and under which conditions the density functions are infinitely divisible--in which case there is an associated Levy process. Application to option price computations in finance will be presented.

For background information on this topic the website [www.2-ept.com](http://www.2-ept.com) can be considered.

**Venue:** Seminar Room, Hamilton Institute, Rye Hall, NUI Maynooth

**Time:** 2.00pm - 3.00pm

Travel directions are available at [www.hamilton.ie](http://www.hamilton.ie)