

# On spectral collocation methods for solving differential and integral equations

*Thursday, 15 December 2016 14:40 (30 minutes)*

## Summary

Node distributions for computing spectral differentiation matrices and integration matrices are proposed and studied.

A fast algorithm for computing integration matrices for an arbitrary node distribution is developed. Numerical experiments have shown that the proposed node distributions can yield results of higher accuracy than those obtained by the most commonly used Chebyshev-Gauss-Lobatto node distribution.

**Presenter:** Dr NGUYEN, Hoang