

RATIONAL APPROXIMATION FOR DATA-DRIVEN MODELING AND
COMPLEXITY REDUCTION OF LINEAR AND NONLINEAR
DYNAMICAL SYSTEMS (MS - ID 69)

Spurious poles

Nick Trefethen

Oxford University

`trefethen@maths.ox.ac.uk`

Spurious poles of rational approximations are fascinating in theory and troublesome in practice. This talk reviews the mathematical and computational sides of this subject and explores the use of the two-step method of AAA-least squares approximation for avoiding the problem.