Short citation:

Professor Euan Spence of the University of Bath is awarded a Whitehead Prize for his profound contributions to the theoretical understanding and design of numerical algorithms for wave propagation and scattering at high frequency, particularly through the development and application of methods from the world of semiclassical analysis.

Long citation:

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In one strand of this work Spence, with collaborators, has combined arguments in a numerical analysis tradition with new semiclassical results to shed light, through rigorous analysis, on the high frequency behaviour of classical numerical methods for time harmonic wave scattering and propagation.

Notably, this work has led, via new semiclassical results about the high frequency components of integral operators, to a proof of a long-