

Mathematics Content Research:

1) Henstock approach to Stochastic Integration

Henstock integration is known to encompass the classical Riemann integral and the Lebesgue integral and is more general than the two integrals. In this study, Henstock integration is used to give an alternative definition to the stochastic integral. It turns out that Henstock's stochastic integral encompasses the classical stochastic integrals. Henstock's approach is able to give a more direct results of the classical Integration by Parts formula and the Ito's Formula. It can be extended to the cases of n -dimension to handle the Multiple Stochastic Integrals

(Status: Ongoing)

2) Henstock's Theory of Integration and Stochastic Differential Equations (Status: Starting Soon)

Honours Students' Project

Henstock approach to the Wiener
Integral and

Henstock approach to Multiple Wiener
Integral

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