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concentrates on the
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theory. The topics are
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Normal Inverse
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finally, multi-
dimensional models.

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reader to use the models of the first part for pricing and risk management, covering methods based on direct integration and Fourier transforms, and detailing the implementation of the COS, CONV, Carr-Madan method or Fourier-Space-Time Stepping. This is

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Corresponding inverse transform to express option pricing formulas.

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much more.

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concerned with
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while a financial

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study the structural

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take the share price

as a given, and

attempt to use

stochastic calculus to

obtain the

corresponding value

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stock. The

fundamental theorem

of arbitrage-free

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formula are amongst

the key

results. Mathematical

finance also overlaps

heavily with the fields

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finance and financial
engineering. The

latter focuses on

applications and

modeling, often by

help of stochastic

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on building tools of

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introduction to
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