

Spin, Speed and Strategy

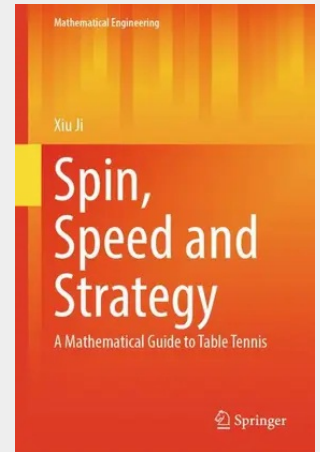
A Mathematical Guide to Table Tennis

This book presents a cohesive exploration of table tennis through the Table Tennis Notation System (TTNS), a physics-grounded framework that encodes strokes, serves, tactics and entire rallies using binary codes and symbolic notation. It shows how complex ball–bat interactions, governed by mechanics, spin and energy transfer, can be captured with precision, enabling meaningful comparison of playing styles and revealing the underlying logic of the sport.

The text moves from the engineering of blades, rubbers and ball behaviour to the dynamics of rhythm, spin, speed and tactical interaction, before extending these ideas into coded representations of play. It then develops practical applications in coaching, training, performance analysis and artificial intelligence.

The result is an integrated framework that links mechanical execution to strategic intent, offering players, coaches, analysts and researchers a clear and systematic understanding of the game 's blend of power, touch, control, creativity and strategy.

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