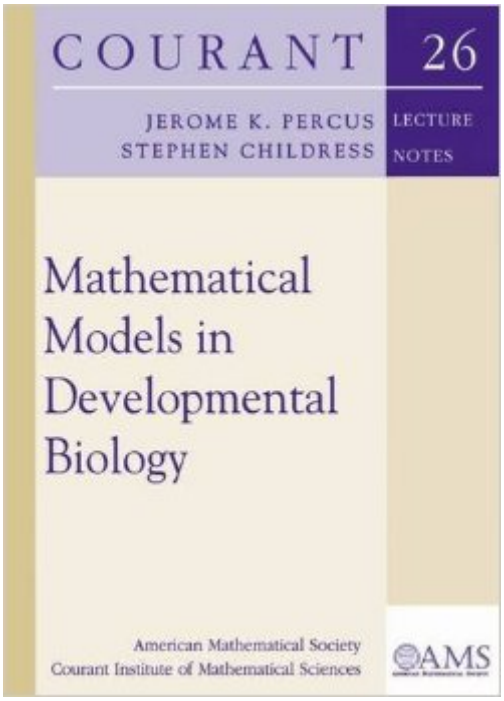
Mathematical Models In Developmental Biology (Courant Lecture Notes)



Synopsis

The path from relatively unstructured egg to full organism is one of the most fascinating trajectories in the biological sciences. Its complexity calls for a very high level of organization, with an array of subprocesses in constant communication with each other. These notes introduce an interleaved set of mathematical models representative of research in the last few decades, as well as the techniques that have been developed for their solution. Such models offer an effective way of incorporating reliable data in a concise form, provide an approach complementary to the techniques of molecular biology, and help to inform and direct future research.

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