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# Timing in the nucleus: replication domains and graph theory

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## Abstract

Recent papers have investigated the link between replication timing, replication domains and topologically associated domains. Graph theory, machine learning and signal processing are key examples for methods applied for segmenting the genome based on contact frequency profiles, and for further linking it with replication domains. This presentation will discuss the latest algorithmic advancements and challenges in genome segmentation in the context of investigating the link between replication dynamics and chromatin folding.

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