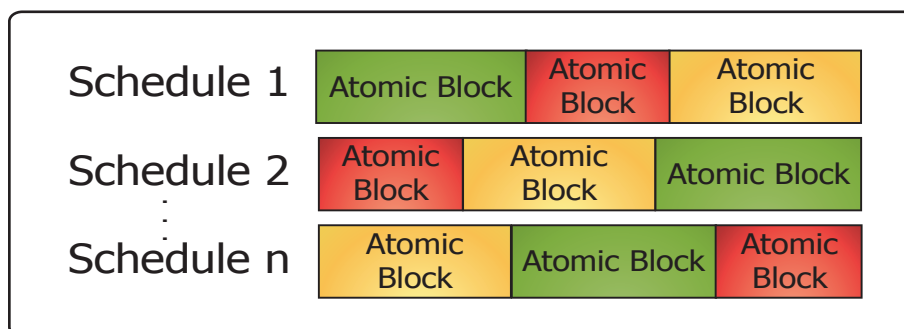# Unit Testing for Concurrent Programs

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- ► **Unit tests catch bugs effectively in sequential code**

- ► **Concurrency makes unit tests non-deterministic**

- ► **Open-source framework for reliable unit testing of concurrent Java applications**

Schedule-Based Testing

- ► **Automatically generate schedule suites**

- ► **Execute unit tests according to schedule**

- ► **Ensure correct locking protocol**

- ► **Validate schedule suite integrity**

- ► **Incorporate testing of distributed applications**

- ► **Better testing at an earlier stage → fewer bugs**