

国立天文台天文シミュレーションプロジェクト成果報告書

研究課題名

利用者氏名(所属機関)

利用カテゴリ XT4S・XT4A・XT4B・XT4C・XT4MD・SX9A・SX9B・SX9MD・
GRAPE-A・GRAPE-B・GRAPE-C・汎用PC

成果の概要を記入してください。必要に応じてページを加えても構いませんが、pdf のファイルサイズの上限は2MB とします。

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The project titled ‘Low-mass planet formation: Oligarchic growth or pebble accretion?’ is still ongoing. Our team has suffered a long delay caused by trouble with the source code. The implementation of gas-driven planet migration, eccentricity and inclination damping, pebble and gas envelope accretion turned out to be much more time-consuming than anticipated. For this reason our team has only published one paper in the series, where we investigated the formation of exoplanetary systems through pebble accretion (Matsumura et al., 2017). We have nearly finished editing the code and will run more production simulations this summer.

Last fiscal year I have also run a high number of simulations of the evolution of the solar system during an episode of late giant planet migration. The results of those simulations are being analysed and we expect to publish a paper early 2019.

Papers published and submitted that have used the CFCA’s services during fiscal 2017:

None.