

概要

1. 交通流の数値モデルに用いられる偏微分方程式について調査を行った Investigate the traffic flow model.
2. NURBS を応用し有限要素法について数学解析を研究した Perform mathematical analysis for the finite element method which applies NURBS.
3. 全変動流れに対する数値計算法について研究した Perform numerical computation for the total variation flow

論文

1. Y. Ueda*, Y. Otaguro, K. Takizawa and T. E. Tezduyar. Element-Splitting-Invariant Local-Length-Scale Calculation in B-Spline Meshes for Complex Geometries. Mathematical Models and Methods in Applied Sciences (2020)

研究発表

1. Y. Giga and Y. Ueda, Numerical computations of split Bregman method for fourth order total variation flow, The 45th Sapporo Symposium on Partial Differential Equations, online, August 2020.
2. Y. Giga and Y. Ueda, Numerical computations of split Bregman method for fourth order total variation flow, Surface and Interface Dynamics, online, July 2020.