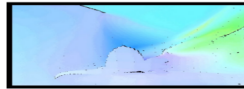


# A Database and Evaluation Methodology for Optical Flow

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(a) First Frame



(b) Ground-Truth Flow



(c) Discontinuity Mask



(d) Flow Field Color Coding

- ▶ Presents a collection of datasets for the evaluation of optical flow algorithms
- ▶ Contributes four types of data to test different aspects of optical flow algorithms:
  - ▶ Sequences with nonrigid motion where the ground-truth flow is determined by tracking hidden fluorescent texture
  - ▶ Realistic synthetic sequences - addresses the limitations of previous dataset sequences by rendering more complex scenes with significant motion discontinuities and textureless regions
  - ▶ High frame-rate video used to study interpolation error
  - ▶ Modified stereo sequences of static scenes for optical flow
- ▶ Evaluates a number of well-known flow algorithms to characterize the current state of the art
- ▶ Extends the set of evaluation measures and improved the evaluation methodology