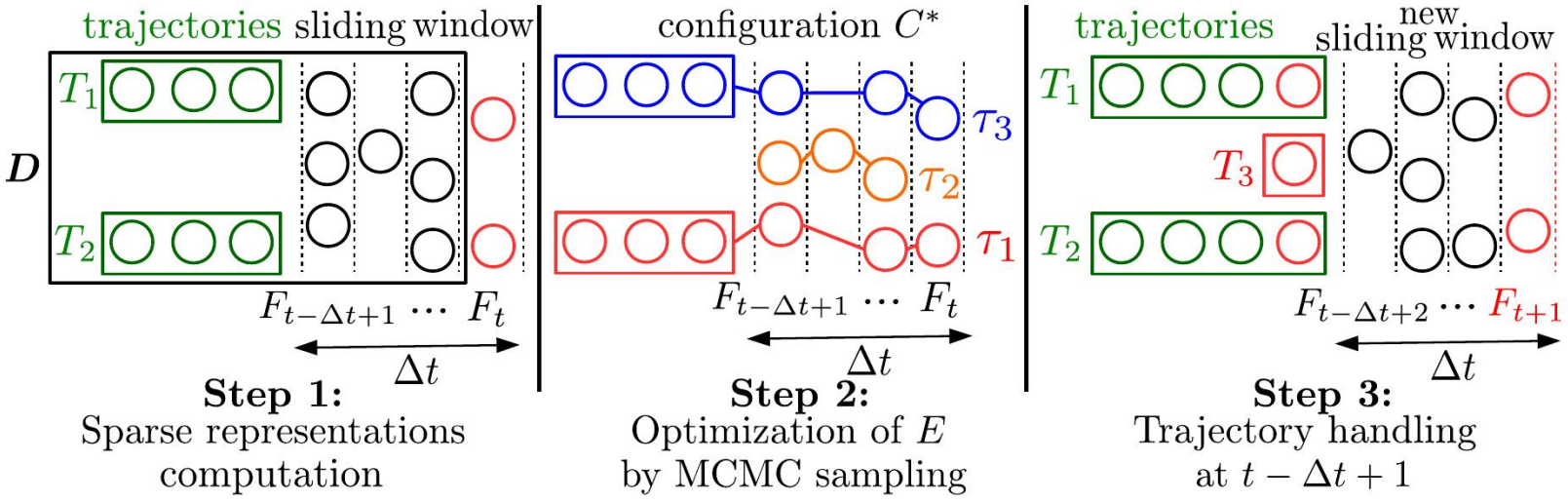
Improving Multi-Frame Data Association with Sparse Representations for Robust Near-Online Multi-Object Tracking

L. Fagot-Bouquet, R. Audigier, Y. Dhome and F. Lerasle (ECCV 2016)



- Multiple object tracking still difficult due to appearance variations, occlusions and detection failures
- Sparse representations-based models successful in single object tracking
- Combining a sparse representation-based appearance model with a sliding window tracking method
- Formulate the multi-frame data association step as an energy minimization problem
- Efficiently exploits sparse representations of all detections
- Structured sparsity-inducing norm is used to compute representations more suited to the tracking context
- Evaluation on MOTChallenge benchmarks