

# LISPflow

**Alberto Rodríguez-Natal**

Albert Cabellos-Aparicio

{arnatal, acabello}@ac.upc.edu

Dino Farinacci

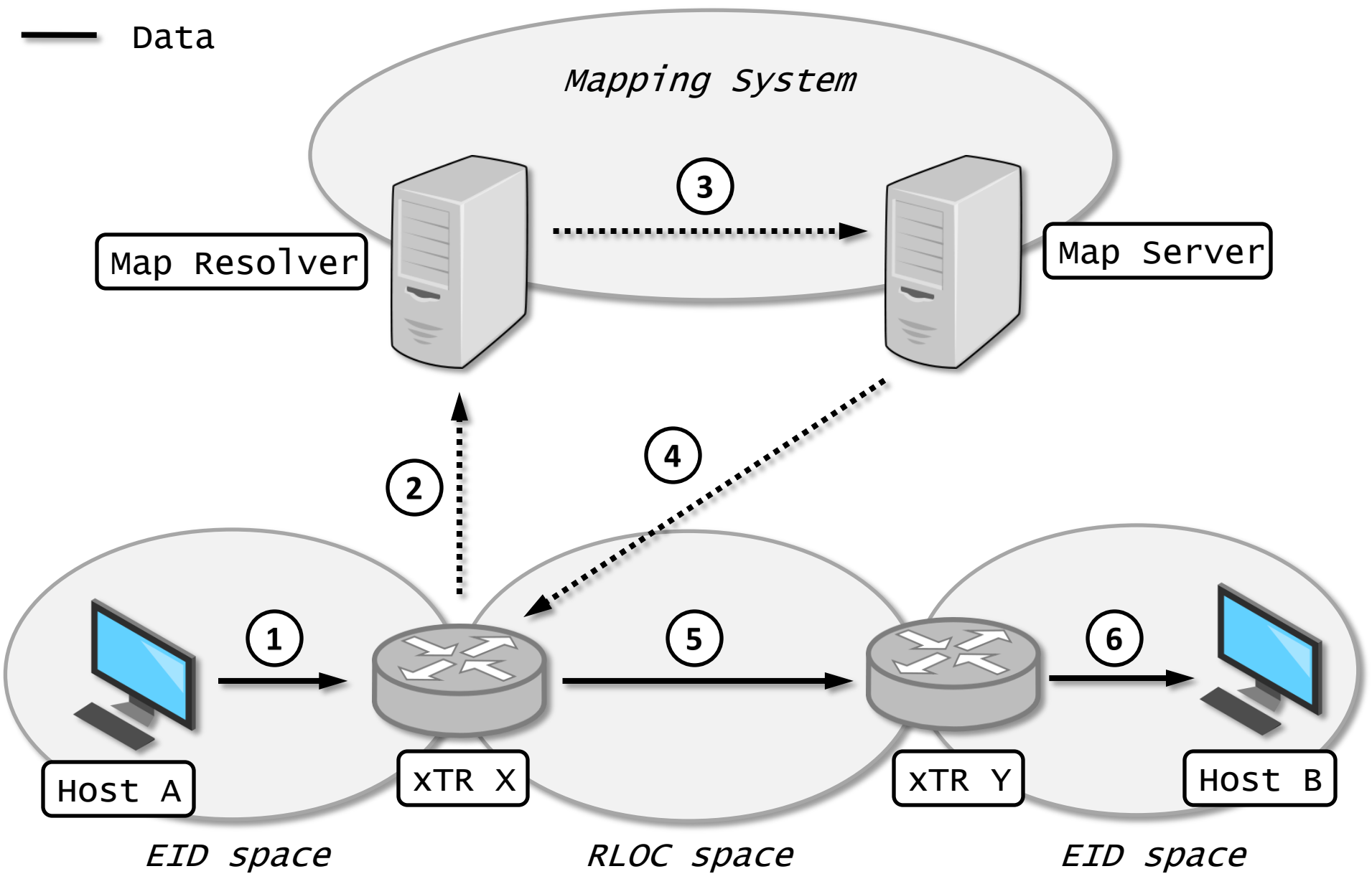
farinacci@gmail.com

# LISP overview

- Locator/Identifier Separation protocol
- Two disjoint namespaces
  - Endpoint Identifiers (EIDs)
  - Routing Locators (RLOCs)
- Map-and-encap approach
- Key components
  - Ingress/Egress Tunnel Routers (xTRs)
  - Mapping System

..... Control

— Data



# LISP as a SDN enabler

- Data and Control already decoupled
  - Data: xTRs
  - Control: Mapping System
- What does LISP provide to SDN?
  - Scalability
  - Centralized network state
  - Inter-Domain

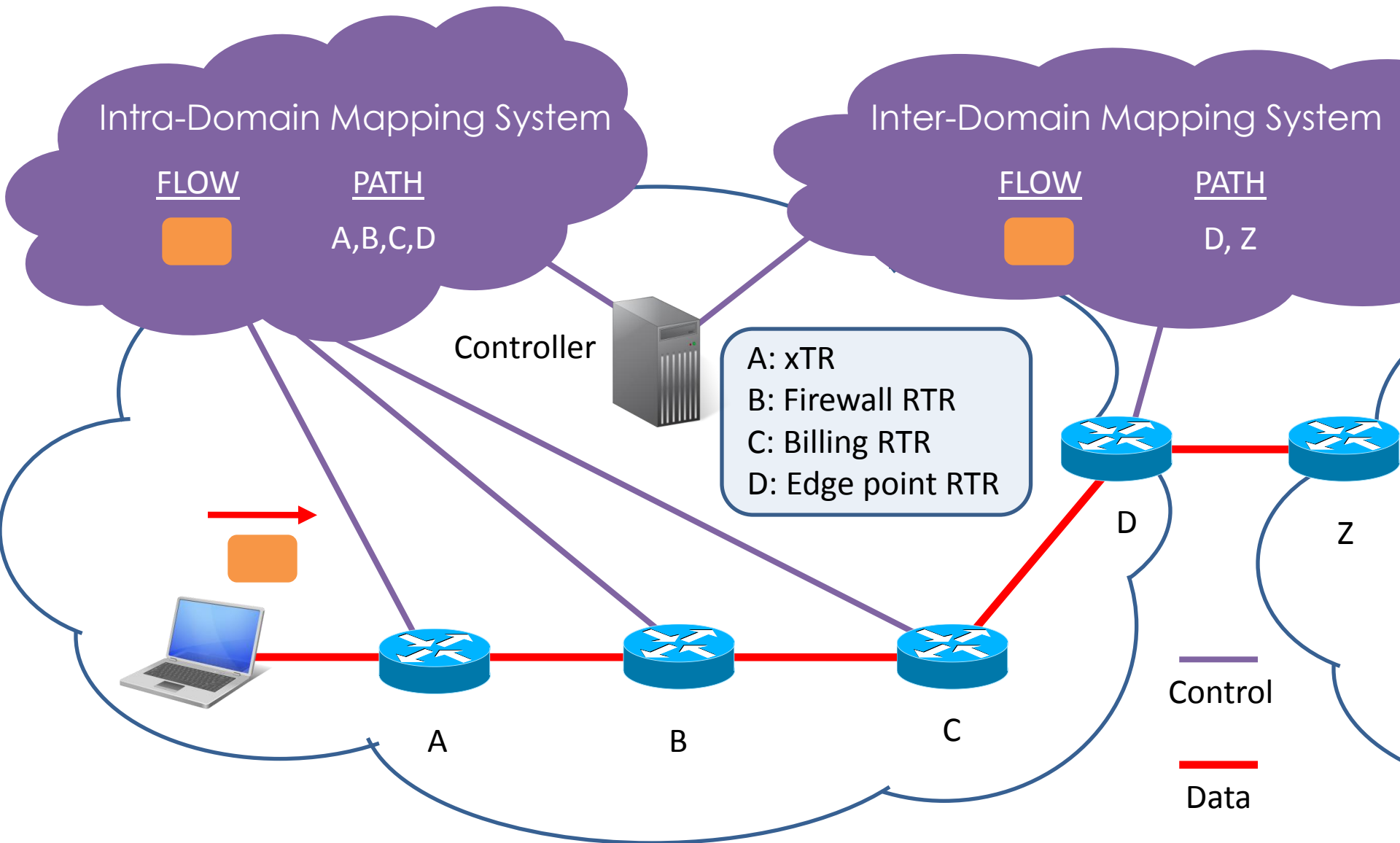
# LISP SDN building blocks

- Flexible namespace (LCAF)
- Distributed mapping database (Mapping System)
- Flexible paths (ELP)
- Network landmarks (RTR)
- Label system (Instance-ID)

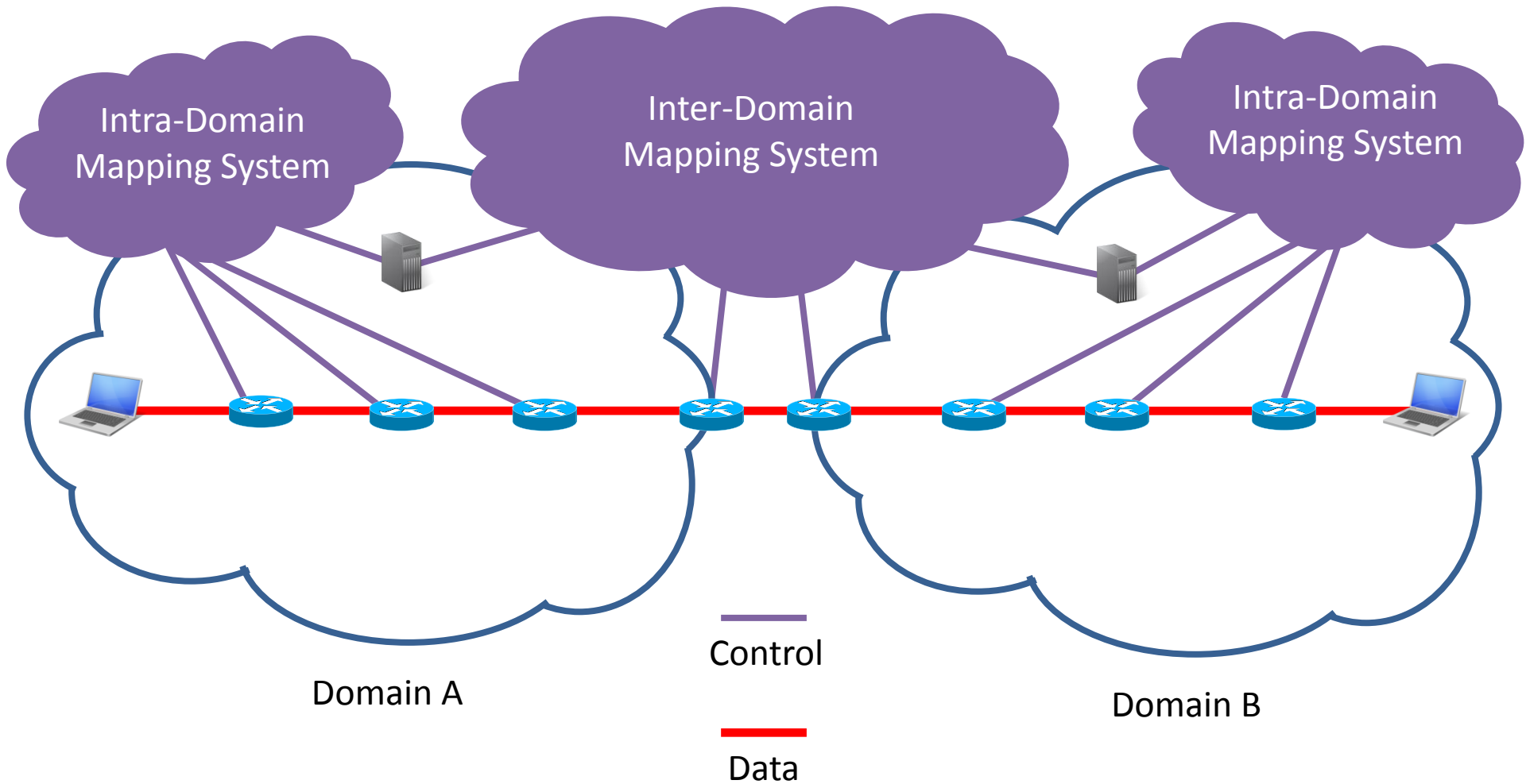
# LISPflow overview

- Optimize LISP for flows
  - Flow = 5-tuple
  
- And use LISP in the appropriate way...

# LISPflow overview



# Inter-domain





# Configuration and Management

- Via existing proposals
  - NETCONF
  - OVSDB
  - OF-Config
  - I2RS
  - ...
- Config data can be stored and carried on generic LCAF

Thanks!