

Point Location

Persistence

- Persistent Structure

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Partially Persistent Structure

- ❖ In 1986, Sarnak and Tarjan introduced the **persistent search tree** into PL applications
- ❖ **PPS** : the current version can be updated and all the **versions**, past and present, can be queried



- ❖ For a **PPS** :
 - each (except the current) version is the predecessor of exactly **one** version
 - its history graph is a **chain**

Fully Persistent Structure

- ❖ Both updates and queries are allowed on any of its versions
- ❖ For an **FPS**
 - each version may be the predecessor of several **versions**,
 - each of which stores the result of an update applied to it; and hence
 - its history graph is a **tree**

