**LARS: A Location-Aware Recommender System**

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**Recommender Systems**

Analyze user behavior to recommend personalized and interesting things to do/read/listen/see

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**Spatial Location Matters**

*Preference Locality*  
*Travel Locality*

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**Location-based Ratings Taxonomy**

*Spatial Ratings for Non-spatial Items*  
*Non-Spatial Ratings for spatial Items*  
*Spatial Ratings for spatial Items*  

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**User Partitioning**

- Adaptive Pyramid Structure.
- Three main goals:  
  - Preference Locality
  - Scalability.
  - Influence.

**Merging**: reduces the number of maintained cells  
- 4-cell quadrant at level (h+1) “merged” into parent at level h  
- Queries at level (h+1) now service at level h for merged region  
- Merging decision made on trade-off between locality loss and scalability gain

**Splitting**: increases number of cells  
- Opposite operation as merging  
- Splitting decision made on trade-off between locality gain and scalability loss

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**Experimental Evaluation Results**

- More localized recommendations gives better quality

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