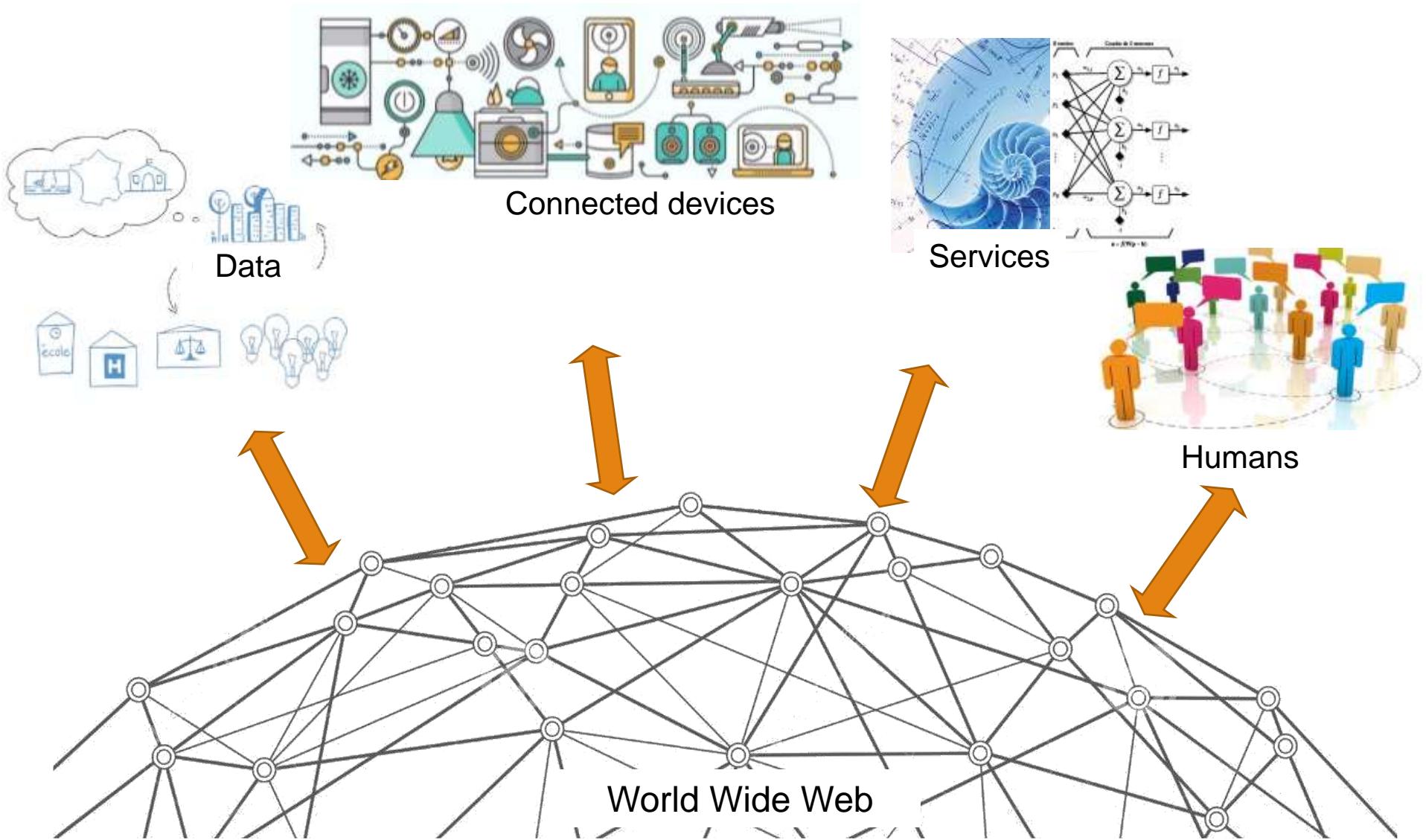


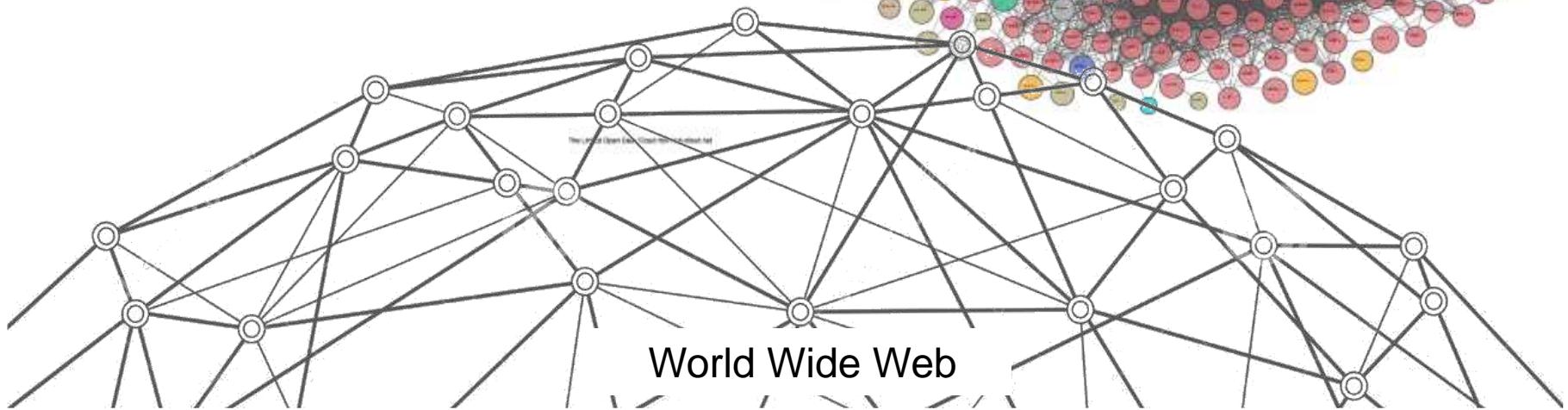
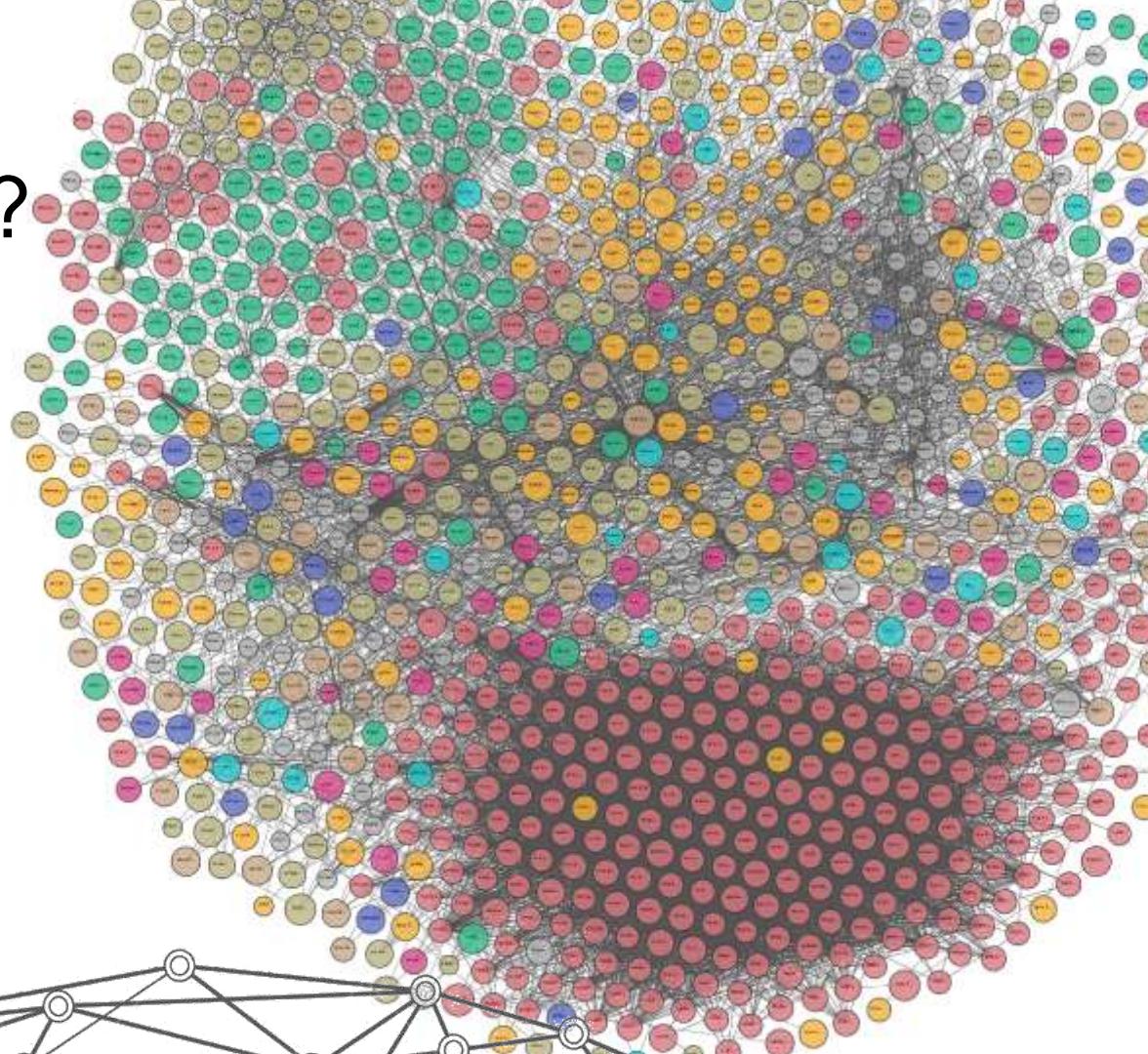
Tutorial ESWC 2018: From heterogeneous data to RDF graphs and back

[Olivier Corby, Catherine Faron Zucker, Maxime Lefrançois, Antoine Zimmermann](#)



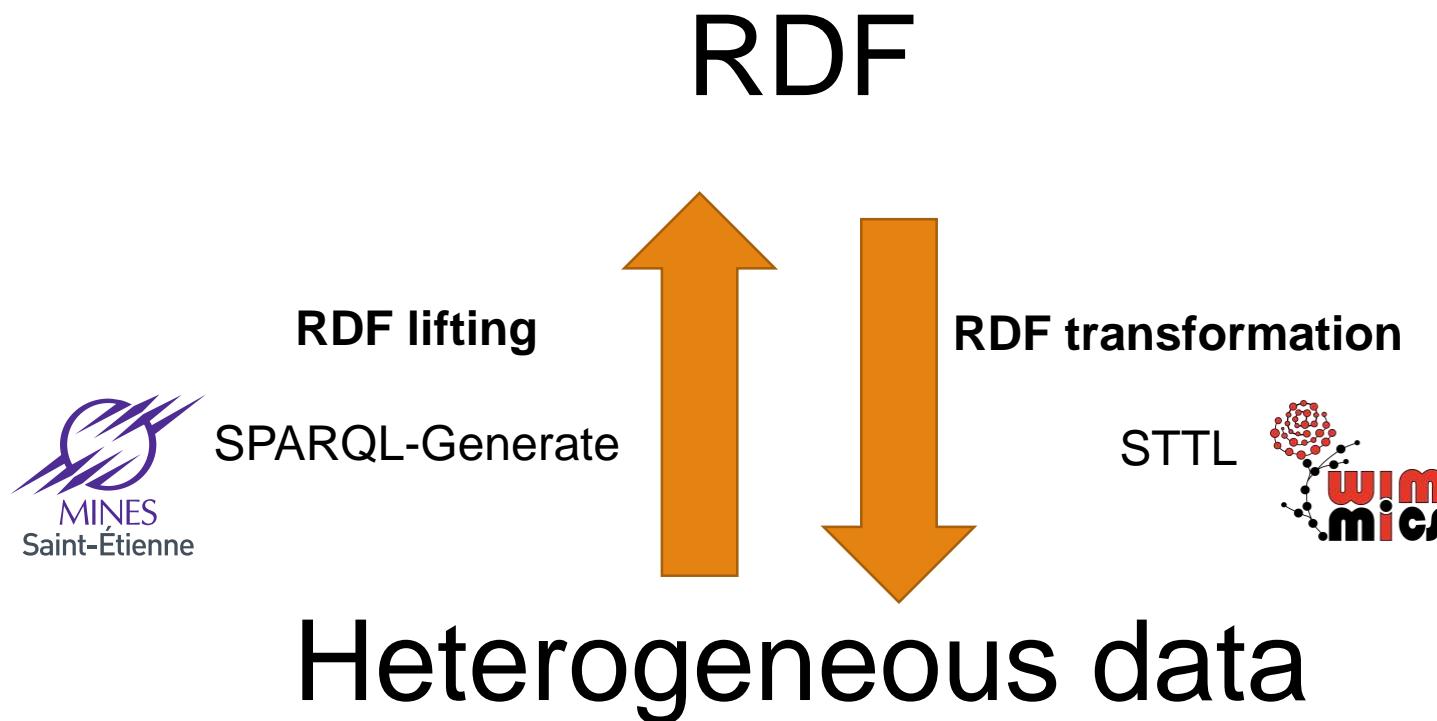


Where is RDF ?



RDF as a lingua franca

- to reach semantic interoperability
- integration and querying of data having heterogeneous formats



Publications on STTL

Corby Olivier, Faron-Zucker Catherine and Gandon Fabien. *LDScript: a Linked Data Script Language*. International Semantic Web Conference. Springer, Cham, 2017.

Corby Olivier and Faron-Zucker Catherine. *STTL: a SPARQL-based transformation language for RDF*. International Conference on Web Information Systems and Technologies. 2015.

Publications on SPARQL-Generate

Lefrançois, Maxime; Zimmermann, Antoine; and Bakerally, Noorani. *A SPARQL extension for generating RDF from heterogeneous formats*. Extended Semantic Web Conference, ESWC, 2017.

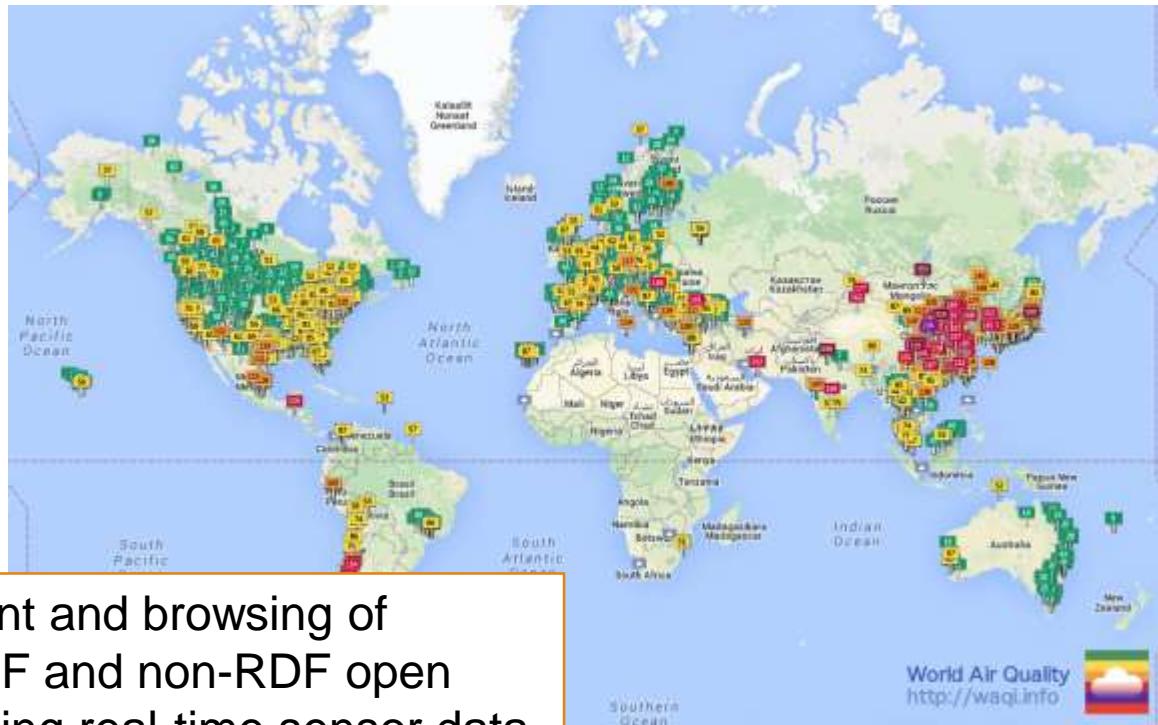
Lefrançois, Maxime; Zimmermann, Antoine; and Bakerally, Noorani. *Flexible RDF generation from RDF and heterogeneous data sources with SPARQL-Generate*. International Conference on Knowledge Engineering and Knowledge Management, 2016

Maxime Lefrançois, Antoine Zimmermann, Noorani Bakerally. *Génération de RDF à partir de sources de données aux formats hétérogènes*, Actes de la 17ème conférence Extraction et Gestion des Connaissances, EGC, Jan 2017, Grenoble, France

Agenda

Before the break: SPARQL-Generate

After the break: STTL



Management and browsing of
existing RDF and non-RDF open
data, including real-time sensor data

We will use (1/2)

Semantic Sensor Network Ontology



W3C Recommendation 19 October 2017 (Link errors corrected 08 December 2017)

This version:

<https://www.w3.org/TR/2017/REC-vocab-ssn-20171019/>

Latest published version:

<https://www.w3.org/TR/vocab-ssn/>

Latest editor's draft:

<https://w3c.github.io/sdw/ssn/>

Implementation report:

<https://w3c.github.io/sdw/ssn-usage/>

Previous version:

<https://www.w3.org/TR/2017/PR-vocab-ssn-20170907/>

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Danh Le Phuoc, Technical Unive

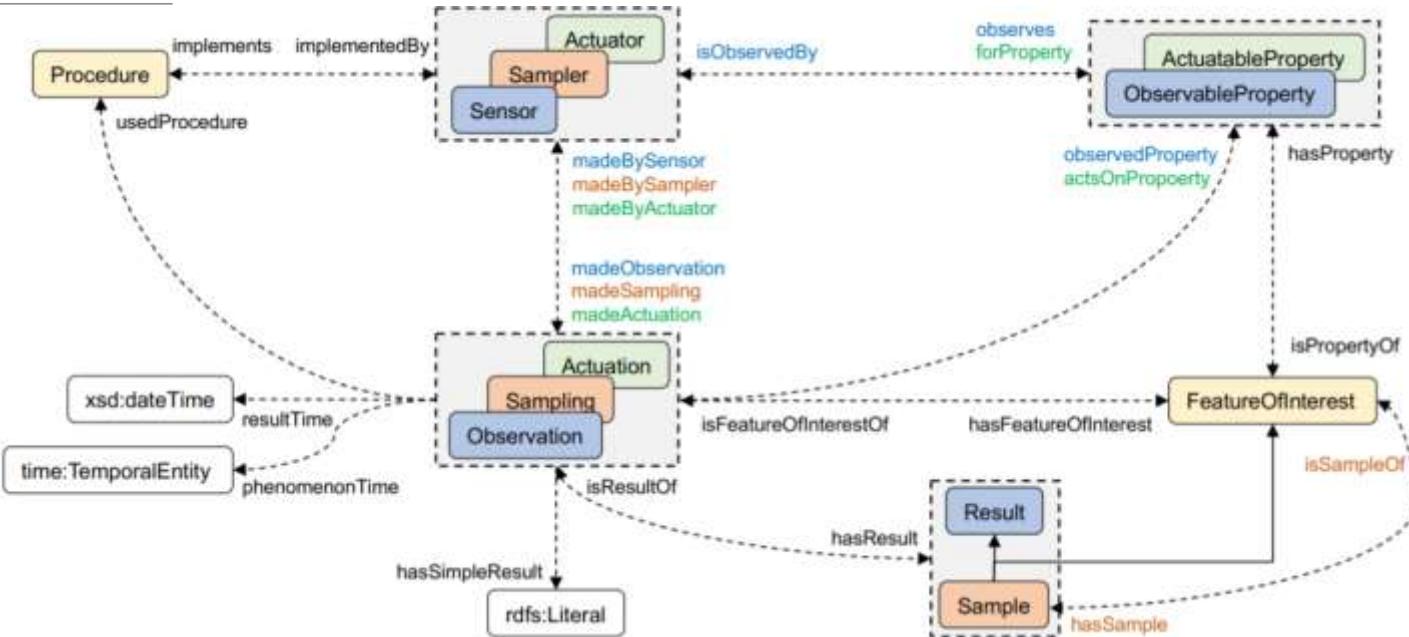
Kerry Taylor, Australian National

Maxime Lefrançois, École Nation

Contributors (ordered alphabetical

Rob Atkinson, Metalinkage

Raúl García-Castro, Universidad



We will use (2/2)

The Unified Code for Units of Measure in
RDF – cdt:ucum and other UCUM Datatypes

“UCUM is a code system intended to include all units of measures being contemporarily used in international sciences, engineering, and business.”

```
@prefix cdt: <http://w3id.org/lindt/custom_datatypes#>.  
  
<room> ex:area "102 m2"^^cdt:ucum .  
  
<room> ex:temperature "21.0 Cel"^^cdt:ucum .  
  
<wall> ex:thermalConductivity "0.27 W/(m2.K)"^^cdt:ucum .  
  
<car> ex:speed "26.3 [mi_i]/h"^^cdt:ucum .
```