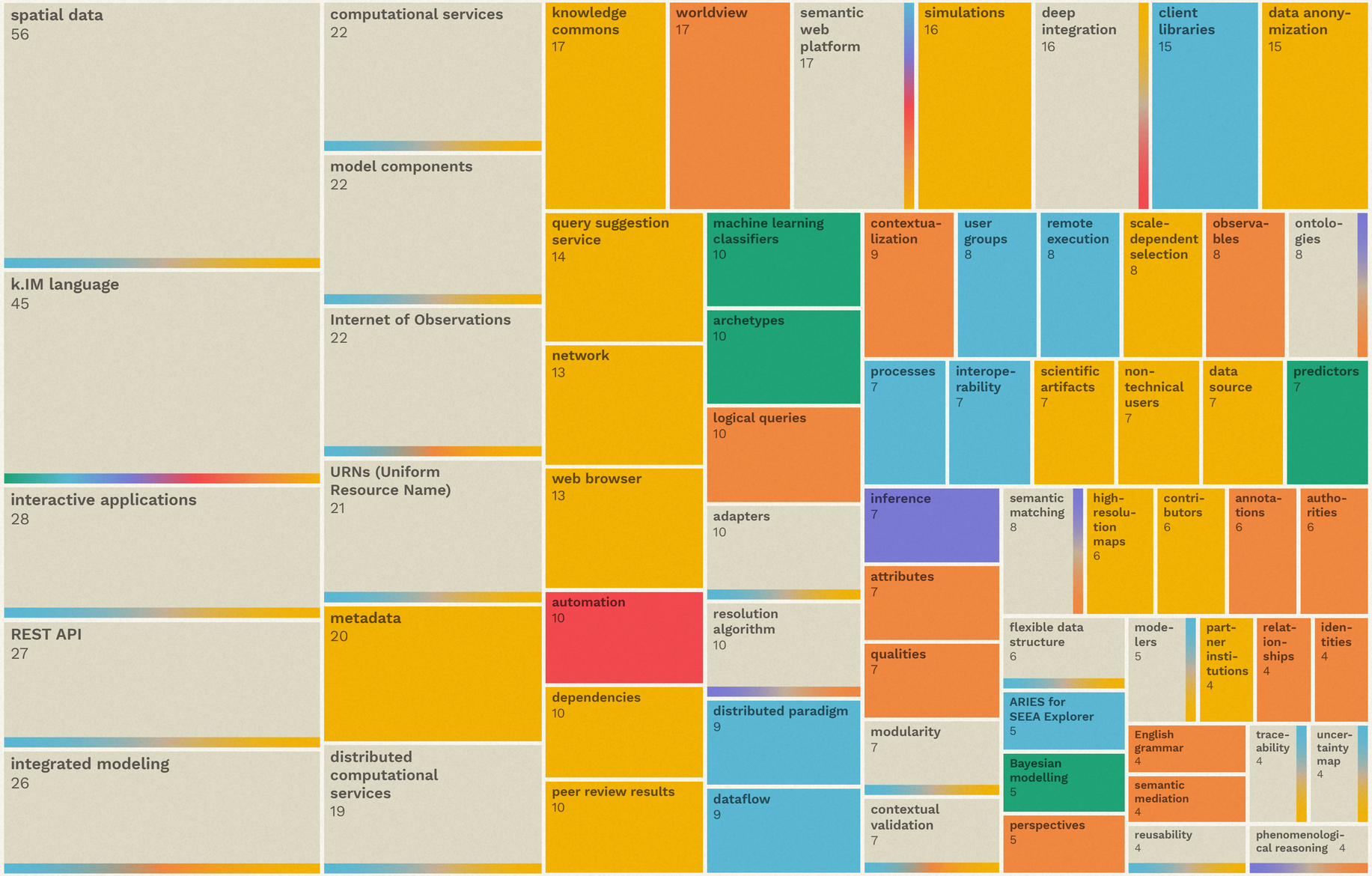
k.LAB: The **AI technology** to drive 21st century science



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Artificial Intelligence (AI) — 4

The science and engineering underlying the development of machines, especially computer programs, capable of performing activities normally thought to require intelligence.

Interoperability — 27

The ability of data/tools from independent resources to integrate or work together with minimal effort.

Knowledge integration — 36

The process of appropriately combining independently produced scientifc data and models, by knowing when, where and how to appropriately re-use them.

Machine learning — 5

The use of various algorithms to uncover patterns (e.g., correlation or clustering) in large datasets.

Machine reasoning — 7

Applied to a semantically annotated knowledge base, machine reasoning can support automated validation and linking of data and models using logic to assemble them into useful structures for computation.

Semantics — 22

The formalization of knowledge in terms of logical declarations and axioms, collected into ontologies (which define concepts and the relations between them), breaking knowledge into modular components.

HOW TO READ IT

Size: N. of occurrences in the Paper (1)
Color: Semantic Cluster

Word
Occurrences

ARIES

k.LAB
Knowledge Integrated Modelling

bc3 BASQUE CENTRE FOR CLIMATE CHANGE
Klima Aldaketa Ikergai
Sustainability, that's it!

EXCELENCIA MARÍA DE MAEZTU

Sources:
1) k.LAB Technical Note (2021): https://docs.integratedmodelling.org/technote/; 2) The global environmental agenda urgently needs a semantic web of knowledge (2022): https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-022-00258-y