## Semantic Web and Web of Data.

The web has evolved a lot since its first uses in the early 90s.

-> web uses that focused on publishing -> searching and browsing documents for web uses that directly allow us to publish and link databases on the web.

To enable these new uses, the W3C consortium and a certain number of research and development actors on the web have proposed a roadmap.

Training in the standards resulting from this roadmap.

Languages -> represent and publish linked data on the web -> query and select these data very precisely remotely and through the web -> reason and deduce new data to enrich the published descriptions -> trace the entire history of these data.

Classes by Inria Sophia Antipolis.

https://www.inria.fr/fr/centre-inria-sophia-antipolis-mediterranee

\* Fabien GANDON, deputy scientific delegate of Inria Sophia Antipolis, Research Director and head of the Wimmics team, and representative of Inria at W3C where he participated in several standardization groups. His research focuses mainly on the evolution of the web, the semantic web and the social web, knowledge modeling and engineering, ontologies. He will teach week 1, towards a web of data, week 4, ontologies and RDFS schemas and week 7 towards more data integration.

\* Catherine Faron Zucker is a lecturer at the Université Côte d'Azur, responsible for the Web Science department of the Polytech Nice Sophia engineering school. His research focuses mainly on the semantic web, knowledge modeling and engineering, ontologies. She will teach week 2, the RDF data model and week 6, specific schemas.

\* Olivier Corby is an Inria researcher in the Wimmics team and his

research mainly concerns the Semantic Web and the representation of

knowledge and reasoning based on graphs. He is the designer of the Corese software.

He will teach week 3, the SPARQL query language and week 5, formalization in OWL.

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