



Scientific Computing

TA 2



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MaRDI Dienstag

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Task Area 2 Measures

1. **Algorithm Knowledge Graph**
2. Open Interfaces
3. Benchmark Framework
4. CSE Workflows

Measure 1: Algorithm Knowledge Graph

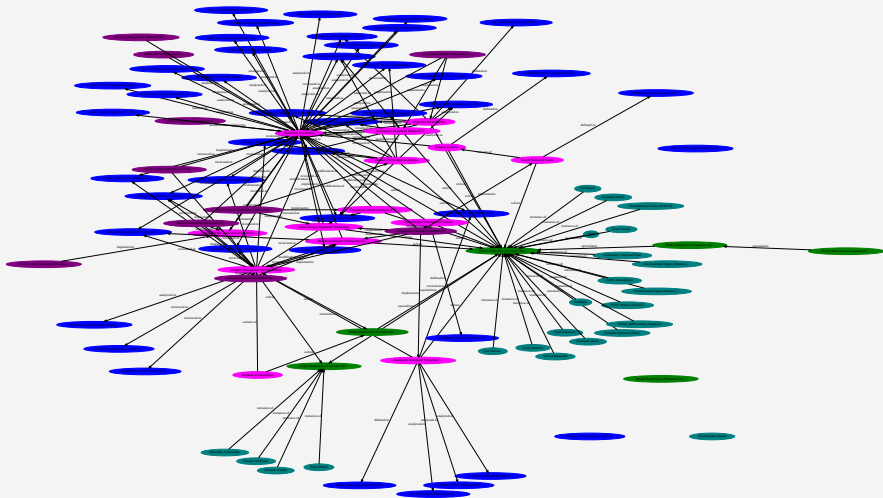
Progress Report:

- ✔ Ontology prototype defined (Extensions and modifications may occur)
- 🏗️ Demonstrator 1: *Model Order Reduction* (Under construction)
- 🕒 Demonstrator 2: *Numerical Linear Algebra* (In preparation)
- 📄 Demonstrator selecting (*Runge-Kutta Methods?*)
- 🏗️ Query coding (Learning SPARQL by doing)
- 📄 Frontend planning (Heavily utilizing SPARQL-over-HTTP)

Technology Stack:

- ✘ Syntax: RDF / Turtle
- ✘ Ontology: RDFS / OWL
- ✘ Endpoint: ARQ / Fuseki (Apache Jena)

Current Model Order Reduction Knowledge Graph



Furthermore . . .

- ✓ Internal communication and regular meeting set up
- i **Measure 2:** Demonstrator selection, *René Fritze* (& *Hendrik Kleikamp*) start 2022-01
- 🕒 **Measure 3:** Literature research, waiting for staff
- 🕒 **Measure 4:** Waiting for staff
- 📄 **GAMM Rundbrief** (Q1 2022) writing
- 📄 **Questionnaire** (Q1 2022) planning
- i **Workshop** (Q3 2022) planning



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