

On the Need for Software Engineering Support for Sustainable Scientific Software

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WSSSPE3 Workshop
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Background

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- Primary Organizer of Software Engineering for Science workshop series
 - <http://www.SE4Science.org>

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 - Peer code review
 - Test-driven development (TDD)

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- Surveys of Scientific Software community

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Basic Assumption

Use of appropriate SE practices
Leads to more sustainable software

Observations

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 - TDD (properly tailored)

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 - Scientific software developers often don't know what they don't know
- **Appropriate** SE practices are useful for Sustainable Scientific Software
 - Lightweight processes preferred
 - TDD (properly tailored)
 - Peer code review – identifies problems missed by testing

Path Forward

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- Need for documented SE success stories in Science

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- Need for documented SE success stories in Science
- Socialize success stories (and failures)
- Venues
 - SE4Science workshops (<http://www.SE4Science.org>)
 - New SE Track in *CiSE*

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