

### Sage

#### **Prof. William Stein**

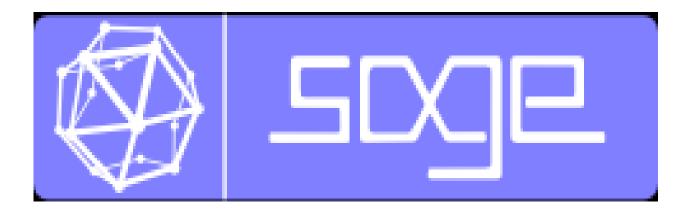
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# What is Sage?

- **Goal:** Create a viable free open source alternative to Magma, Maple, Mathematica and Matlab.
- A large open source mathematics software project with well over 10,000 users and nearly 200 contributors.





# Market Opportunity

- Mathematical Software solutions are used in a variety of fields
  - > Pure Mathematics
  - > Science: Physics, Chemistry, Statistics, ...
  - > Engineering
  - > Finance
  - > Education: College, University
- Economic considerations entail re-evaluation of currently used solutions in favor of open-source software.



# Value Proposition

- \$ 0 + you get the source-code
- Secondary value propositions:
  - > Sage is never "unavailable" due to licensing.
  - > Investment into teaching materials are not lost.
  - Learning a common programming language (Python) has cross-effects.
  - > Third-party library/extension stay useful since the product is maintainable; Code might migrate into main product line.
  - > Users are empowered to fix problems by themselves.



# **Solution Description**

- Sage is an open-source mathematical software system
  - > Web-Interface, server based; local setup possible; command-line interface; as a library
  - > Covers basics up to frontier research topics in pure mathematics.
  - > Mainstream (Python-based) object oriented framework for mathematics.
  - > Focus on functionality, speed, and robust development.
  - > Visualize using graphics and plots
  - Interactively grasp and explore a problem
  - > Publish your work (LaTeX embedding)



### **Solution Description**



# Differentiators

- Only vendor to offer a common used programming language (Python) at the interface level
- Web-Based Notebook primary interface
- Open-Source
  - > Easy introspection how it works (education)
  - > Possibility to customize or adapt to own infrastructure
  - > Users are empowered to fix problems by themselves.
- Transparency is mandatory for all sciences and Sage transports these values.



# How to sell

- Download for free at http://www.sagemath.org/
- About 5000 unique downloads per month



# How to Engage

- How can Sun field and channel engage with your organization
  - > Press Releases (USA, Europe, Asia, South America)
  - > Support Conference Booths
  - > Community Platforms (online)
  - > Online Advertising
  - Sage-in-a-Box: Sun Hardware + Sage preconfigured and thoroughly tested.



### Thank you!

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