

What is “COMBINE”?

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Developing standards turns out to be difficult

Need people with diverse set of knowledge & skills

- Scientific needs
- Technical implementation skills
- Practical experience

Need manage multiple phases


- Creation
- Evolution
- Support

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- 
- This is just for the specification of the standards, to say nothing of the necessary software and other infrastructure!

Motivations for the creation of COMBINE

Realizations about the state of affairs in late-2000's

- Many efforts overlapped, but lacked coordination
- Efforts were inventing their own processes from scratch
- Many individual meetings meant more travel for many people
- Limited and fragile funding didn't support solid, coherent base

COMBINE = Computational Modeling in Biology Network

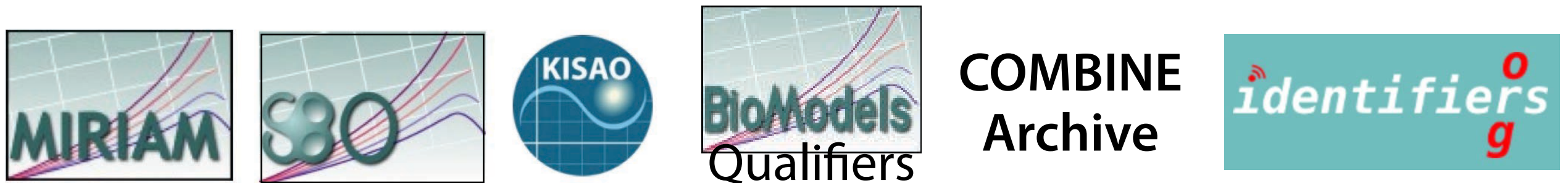
- Coordinate meetings
- Coordinate standards development
- Develop common procedures & tools
- Provide a recognized voice



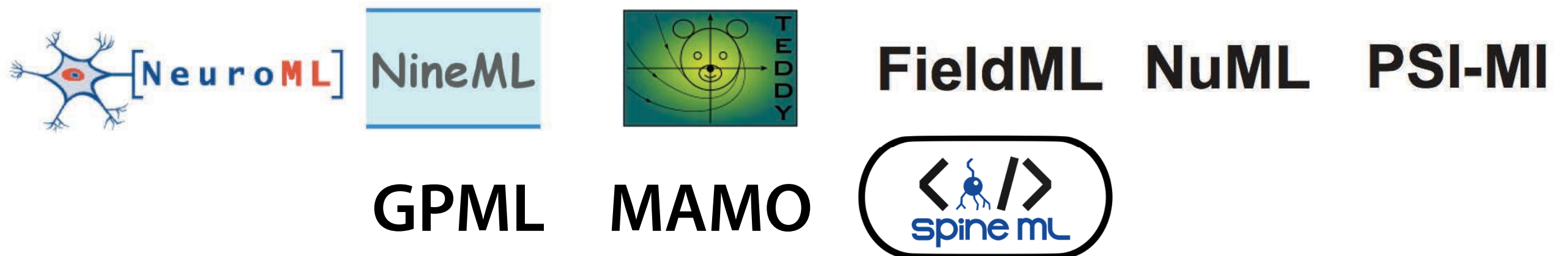
COMBINE Standards



Associated Standardization Efforts



Related Standardization Efforts



Standardization efforts represented in COMBINE today

Examples of community organization

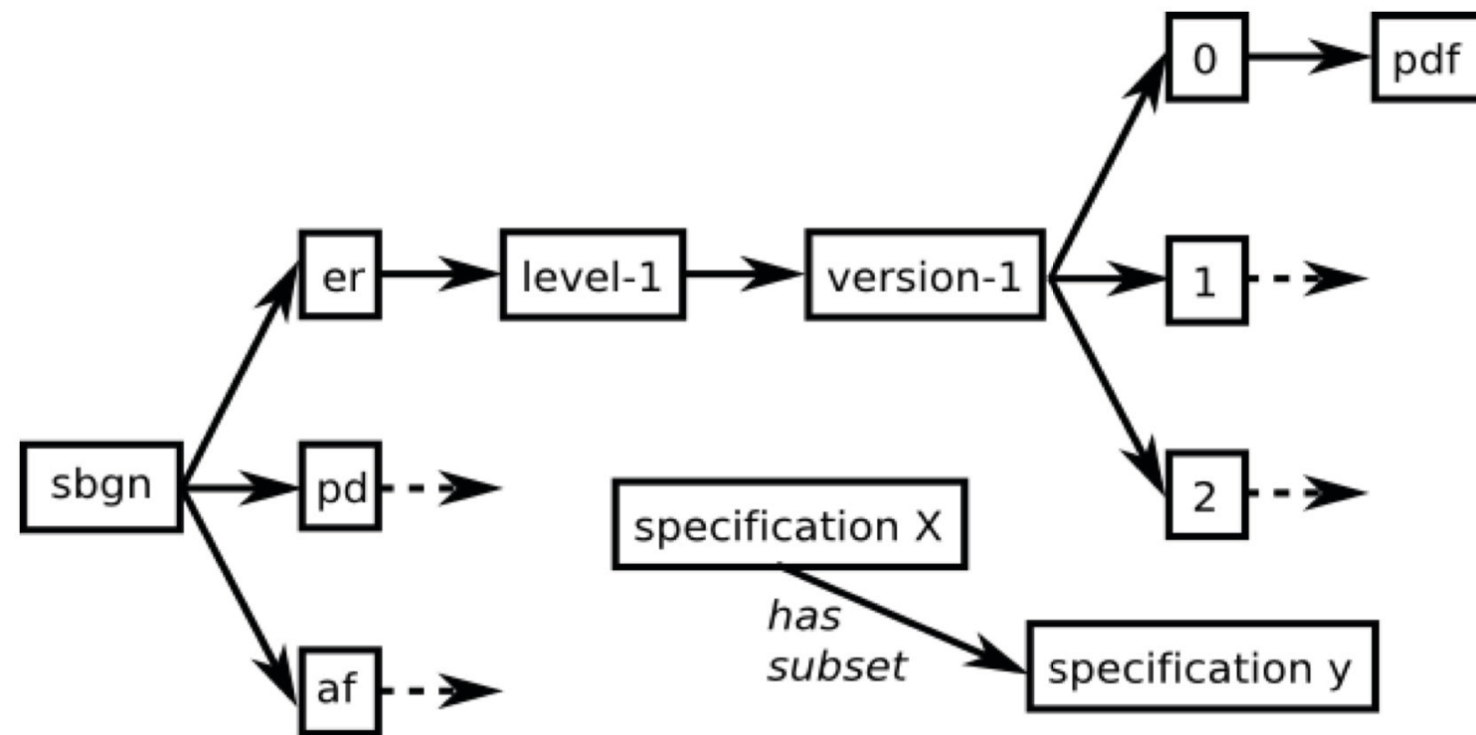
Two main annual meetings, plus ad hoc workshops

- **COMBINE** meeting: status updates, presentations, outreach
- **HARMONY**: Hackathon on Resources for Modeling in Biology
 - Software development, interoperability hacking
 - Next HARMONY: Wittenberg, Germany, April 20–24



Example of practical infrastructure provided by COMBINE

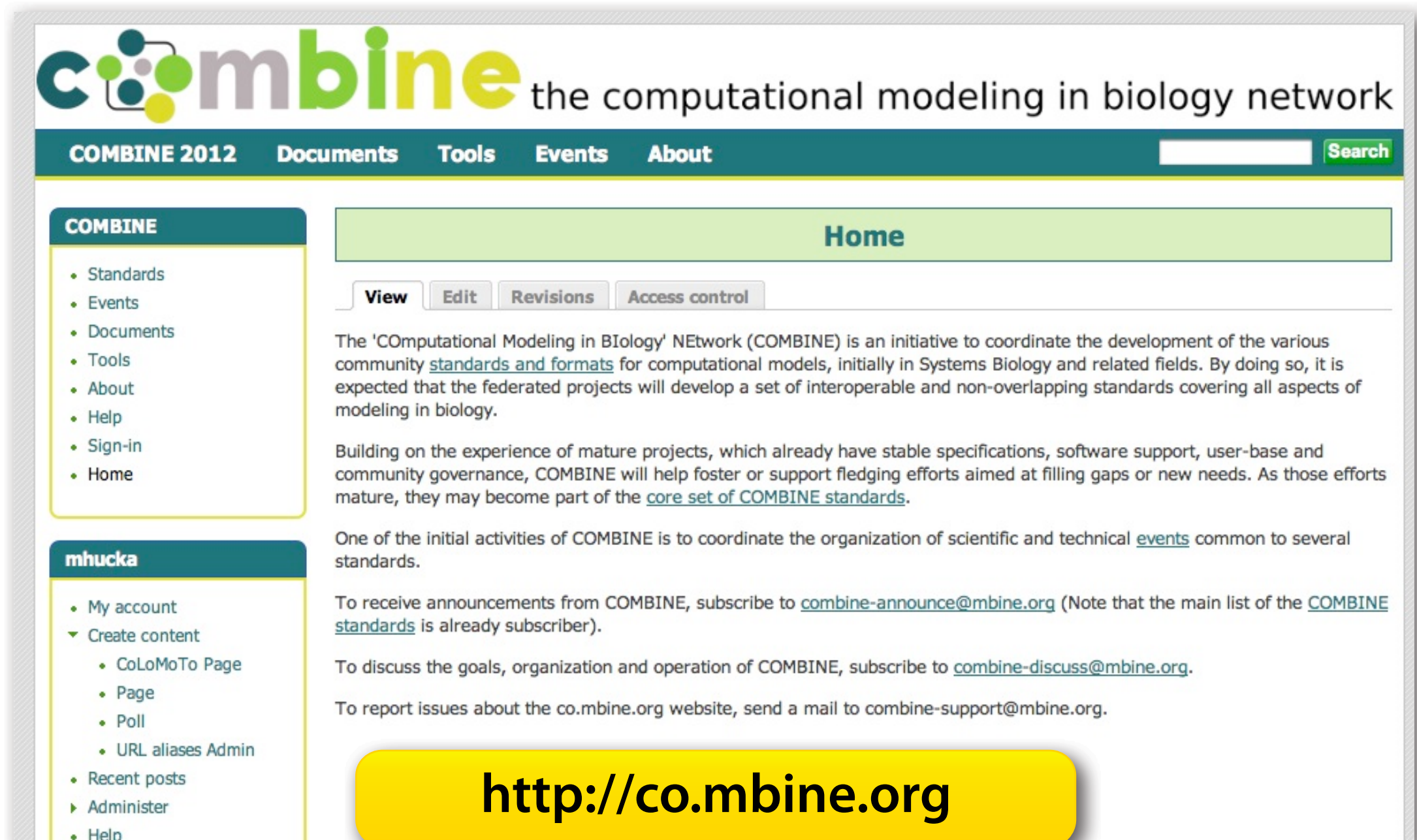
Common URI scheme for specification documents



E.g.: <http://identifiers.org/combine.specifications/sbgn.er.level-1.version-1>

- Resolves to a page that lists where the specification can be found
 - Actual document can be stored anywhere
- Hierarchical structure

COMBINE is open to all—and COMBINE needs you!



The screenshot shows the homepage of the COMBINE website. At the top, the logo "combine" is displayed in a stylized font with green and yellow dots, followed by the text "the computational modeling in biology network". Below the logo is a navigation bar with links for "COMBINE 2012", "Documents", "Tools", "Events", and "About", along with a search box and a "Search" button. The main content area is divided into two columns. The left column contains two sidebars: "COMBINE" with links to Standards, Events, Documents, Tools, About, Help, Sign-in, and Home; and "mhucka" with links to My account, Create content (with sub-links for CoLoMoTo Page, Page, Poll, and URL aliases Admin), Recent posts, Administer, and Help. The right column features a "Home" header, tabs for "View", "Edit", "Revisions", and "Access control", and a main text area. The text area contains three paragraphs: the first describes the COMBINE initiative and its goals; the second discusses the experience of mature projects and the role of COMBINE in fostering new efforts; and the third mentions the organization of scientific and technical events. Below the text are three subscription links: "combine-announce@mbine.org", "combine-discuss@mbine.org", and "combine-support@mbine.org". A large yellow button at the bottom of the screenshot displays the URL "http://co.mbine.org".

COMBINE the computational modeling in biology network

COMBINE 2012 Documents Tools Events About Search

COMBINE

- Standards
- Events
- Documents
- Tools
- About
- Help
- Sign-in
- Home

mhucka

- My account
- ▼ Create content
 - CoLoMoTo Page
 - Page
 - Poll
 - URL aliases Admin
- Recent posts
- Administer
- Help

Home

View Edit Revisions Access control

The 'COMputational Modeling in BIology' Network (COMBINE) is an initiative to coordinate the development of the various community [standards and formats](#) for computational models, initially in Systems Biology and related fields. By doing so, it is expected that the federated projects will develop a set of interoperable and non-overlapping standards covering all aspects of modeling in biology.

Building on the experience of mature projects, which already have stable specifications, software support, user-base and community governance, COMBINE will help foster or support fledging efforts aimed at filling gaps or new needs. As those efforts mature, they may become part of the [core set of COMBINE standards](#).

One of the initial activities of COMBINE is to coordinate the organization of scientific and technical [events](#) common to several standards.

To receive announcements from COMBINE, subscribe to combine-announce@mbine.org (Note that the main list of the [COMBINE standards](#) is already subscriber).

To discuss the goals, organization and operation of COMBINE, subscribe to combine-discuss@mbine.org.

To report issues about the co.mbine.org website, send a mail to combine-support@mbine.org.

<http://co.mbine.org>

Current coordinators:

- Gary Bader, Martin Golebiewski, Michael Hucka, Nicolas Le Novère, Chris Myers, David Nickerson, Falk Schreiber