

# Physics Planning

(Via physics wiki pages)

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# Wiki Pages Available

- [http://mailman.fe.infn.it/superbwiki/index.php/Physics\\_Portal](http://mailman.fe.infn.it/superbwiki/index.php/Physics_Portal)
- Theory classification for our colleagues to edit the Wiki

The screenshot shows a Mozilla Firefox browser window displaying the 'Physics Portal' page of the SuperB Wiki. The browser's address bar shows the URL [http://mailman.fe.infn.it/superbwiki/index.php/Physics\\_Portal](http://mailman.fe.infn.it/superbwiki/index.php/Physics_Portal). The page features a navigation sidebar on the left with links like 'Main Page', 'Community portal', and 'Recent changes'. The main content area has tabs for 'article', 'discussion', 'edit', 'history', 'move', and 'watch'. The 'article' tab is active, showing the 'Physics Portal' title and a 'Contents' list with links to 'Aims', 'Organisation', 'Meetings', 'Physics Tools', 'Documentation', 'Recent Conference Talks and Seminars', and 'Modifications to the Wiki Page'. The 'Aims' section is expanded, stating the portal's purpose for the TDR and listing two contributions: a Technical Proposal (due 2009) and a Technical Design Report (due 2010). The 'Organisation' section mentions coordinators and working groups. The 'Meetings' section notes that meetings are archived on the INDICO Physics Archive. The browser's status bar at the bottom shows the Windows taskbar with various open applications and the system clock at 9:24 PM.

Physics Portal - SuperBWiki - Mozilla Firefox

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[http://mailman.fe.infn.it/superbwiki/index.php/Physics\\_Portal](#)

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Bevan my talk my preferences my watchlist my contributions log out

article discussion edit history move watch

## Physics Portal

Contents [hide]

- 1 Aims
- 2 Organisation
- 3 Meetings
- 4 Physics Tools
- 5 Documentation
- 6 Recent Conference Talks and Seminars
- 7 Modifications to the Wiki Page

### Aims

This page serves as the main portal for preparation of the physics contributions for the TDR. The goals are to refine the arguments for SuperB's role in elucidating our understanding of new physics and standard model processes in the coming decade. This work will result in two specific contributions

- Technical Proposal [Due by the end of 2009]
- Technical Design Report [Due by the end of 2010]

### Organisation

This work is being coordinated by Adrian Bevan, David Brown, Marco Ciuchini and Achille Stocchi [email us](#) if you would like to contribute or find out more information.

There are a number of SuperB [working groups](#). Each of these is charged with concentrating on the study of a particular area of the SuperB physics potential. The working groups are described in more detail at the [SuperB WG page](#). If you are interested in contributing to the SuperB physics effort, please take a look at the working group web pages and either contact the working group conveners directly or get in touch with [email us](#) for an overview of possible activities that are un(der)-covered.

### Meetings

All SuperB Physics meetings are archived on the [INDICO Physics Archive](#). The main physics meetings are listed below,

Find: bevan Find Next Find Previous Highlight all Match case

start Physics Portal - Super... Inbox for a.j.bevan... 2009 June Perugia Microsoft PowerPoint ... MSVDM 1 2 3 4 9:24 PM

# Working Groups

SuperB WG page - SuperBWiki - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://mailman.fe.infn.it/superbwiki/index.php/SuperB\_WG\_page

ICHEP06 My Pages RC: 05/17 RhoRhoFilter Preprints Q2B AWG sin2beta QMUL SuperB Page BaBar Symposium PPRC

Bevan my talk my preferences my watchlist my contributions log out

**SuperB**

article discussion edit history move watch

## SuperB WG page

[Return to the Physics Portal](#)

The following working groups were set up for the organisation of the Warwick 09 workshop and will be used as an organizational basis for the TDR effort. As the TDR process evolves, we expect the nature and structure of the SuperB WGs to change as necessary. In particular if there are potential areas of interest that are not covered by one of the groups listed below, please contact [email us](#) to discuss the possibility of including this area as part of an existing or new working group.

Group	Name	Web-page
WG1	New Physics in Mixing and CP Violation	<a href="#">WG1 web-page</a>
WG2	Rare, Radiative and semi-leptonic decays	<a href="#">WG2 web-page</a>
WG3	Lepton Flavor Violation and New Physics Models	<a href="#">WG3 web-page</a>
WG4	Charm Mixing and CP Violation in D decays	<a href="#">WG4 web-page</a>
WG5	Spectroscopy, Exotica and Other Physics	<a href="#">WG5 web-page</a>
WGA	Phenomenology dealing with various topics	<a href="#">WGA web-page</a>
WGB	Theoretical uncertainties	<a href="#">WGB web-page</a>
WGC	Tools	<a href="#">WGC web-page</a>

[Return to the Physics Portal](#)

Each group has a wiki page

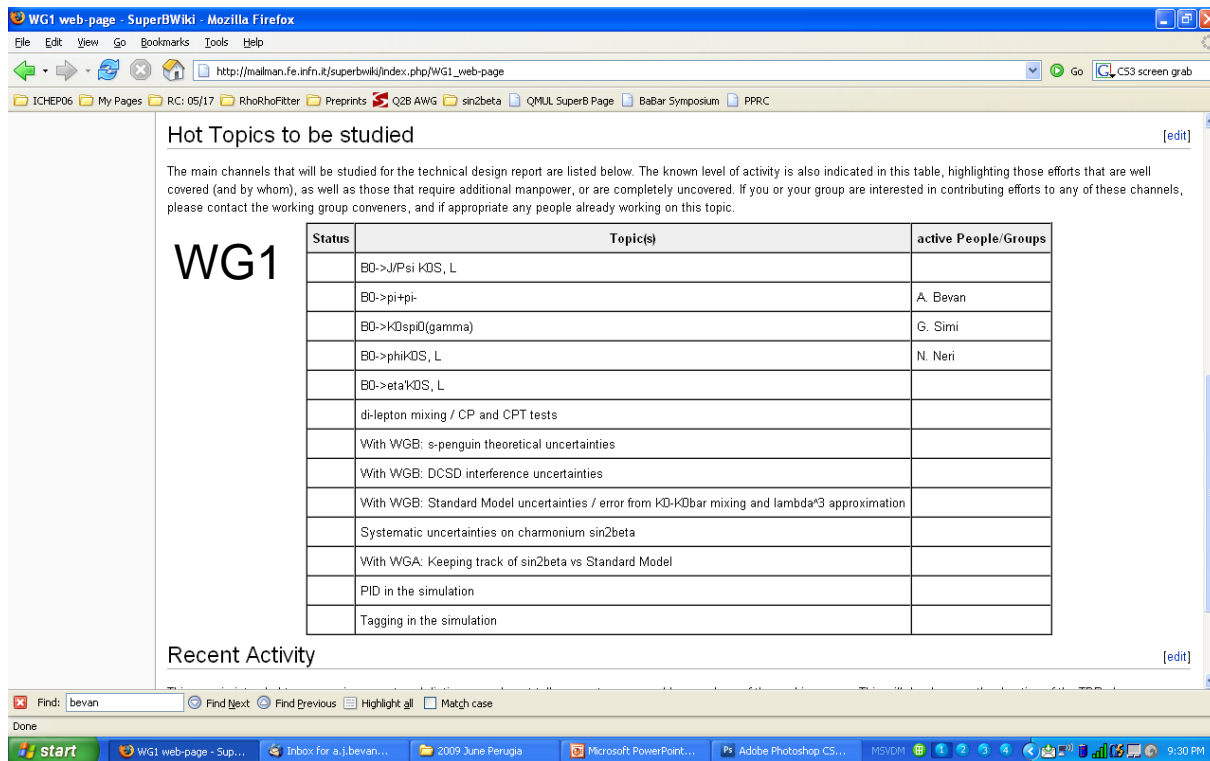
This page was last modified 19:14, 11 May 2009. This page has been accessed 136 times. [Privacy policy](#) [About SuperBWiki](#) [Disclaimers](#)

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# Working groups keep track of activities

- Charge
- Conveners
- Hot Topics
- Recent Activity



The screenshot shows a web browser window displaying the 'WG1 web-page' on the SuperB Wiki. The page is titled 'Hot Topics to be studied' and includes a table listing various topics and the active people/groups involved. Below the table, there is a section for 'Recent Activity'.

**WG1**

Status	Topic(s)	active People/Groups
	B0->J/Psi K0S, L	
	B0->pi+pi-	A. Bevan
	B0->K0sp0(gamma)	G. Simi
	B0->phiK0S, L	N. Neri
	B0->eta*K0S, L	
	di-lepton mixing / CP and CPT tests	
	With WGB: s-penguin theoretical uncertainties	
	With WGB: DCSD interference uncertainties	
	With WGB: Standard Model uncertainties / error from K0-K0bar mixing and lambda*3 approximation	
	Systematic uncertainties on charmonium sin2beta	
	With WGA: Keeping track of sin2beta vs Standard Model	
	PID in the simulation	
	Tagging in the simulation	

**Recent Activity**

- Conveners should keep this information up to date.
- Gives an overview of activities for people interested in contributing.
- Will highlight open/undermanned areas.



# Conference Talks/Seminars

Recent SuperB seminars - SuperBWiki - Mozilla Firefox

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http://mailman.fe.infn.it/superwiki/index.php/Recent\_SuperB\_seminars

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article discussion edit history move watch

## Recent SuperB seminars

[Return to the Physics Portal](#)

This page lists (in reverse chronological order) recent seminars on SuperB, linking directly to an electronic version of the seminar. If your seminars are not listed in the tables below, please log in and correct this page!

**Contents** [\[hide\]](#)

- 1 2009
- 2 2008
- 3 2007
- 4 2006

2009

[edit]

navigation

- Main Page
- Community portal
- Current events
- Recent changes
- Random page
- Help
- Donations

search

Go Search

toolbox

- What links here
- Related changes
- Upload file
- Special pages
- Printable version
- Permanent link

Title	Venue	Speaker
<a href="#">The Super Flavour Factory Project (ppt)</a>	CERN	A. Stocchi
<a href="#">The Super Flavour Factory SuperB (pdf)</a>	UAI Oxford	M. Giorgi

2008

Title	Venue	Speaker
<a href="#">The SuperB Facility (pdf)</a>	Glasgow (and other UK institutes)	A. E.

2007

Title	Venue	Speaker
<a href="#">The SuperB Project (pdf)</a>	LBNL	F. Fort
<a href="#">The SuperB Project (ppt)</a>	LNF - Gruppo 1	F. Fort

Recent SuperB conference talks - SuperBWiki - Mozilla Firefox

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ICHEP06 My Pages RC: 05/17 RhoRhoFilter Preprints Q2B AWG sin2beta QMUL SuperB Page BaBar Symposium PPRC

Bevan my talk my preferences my watchlist my contributions log out

article discussion edit history move watch

## Recent SuperB conference talks

[Return to the Physics Portal](#)

This page lists (in reverse chronological order) recent conference talks, linking directly to the conference record of the talk given. If your talk or proceedings are not listed in the tables below, please log in and correct this page!

2009

[edit]

Title	Conference	Speaker	Proceedings
<a href="#">The scientific case for Super B Factories</a>	XXXVII International Meeting on Fundamental Physics, Benasque, Spain, February 2009	Giuseppe Finocchiaro	
<a href="#">Results of the DAPHNE Upgrade and Prospect for a SuperB</a>	La Thuile, March 2009	Pantaleo Raimondi	
<a href="#">The SuperB Project</a>	La Thuile, March 2009	Matteo Rama	
<a href="#">SuperB</a>	Moriond Electroweak, March 2009	Adrian Bevan	<a href="#">arXiv:0905.2305</a>
<a href="#">SuperB</a>	Tenth Conference on the Intersections of Particle and Nuclear Physics, San Diego, USA, May 2009	Adrian Bevan	<a href="#">arXiv:0906.1008</a>

[Return to the Physics Portal](#)

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SuperB Perugia June 2009

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# Wiki: Next Steps

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- Use the physics wiki pages to coordinate activities for the TDR:
  - Existing activities should be identified and entered in the WG pages.
    - This is a job for conveners – if you're working on something e-mail your WG conveners to let them know.
  - Will allow us / you to identify
    - Who is working on what.
    - What needs more manpower.
    - What is done already.
  - Usage should evolve as necessary to serve the WG needs.
  - Physics mailing list for communication (will work soon):
    - [superb-physics@lists.infn.it](mailto:superb-physics@lists.infn.it)

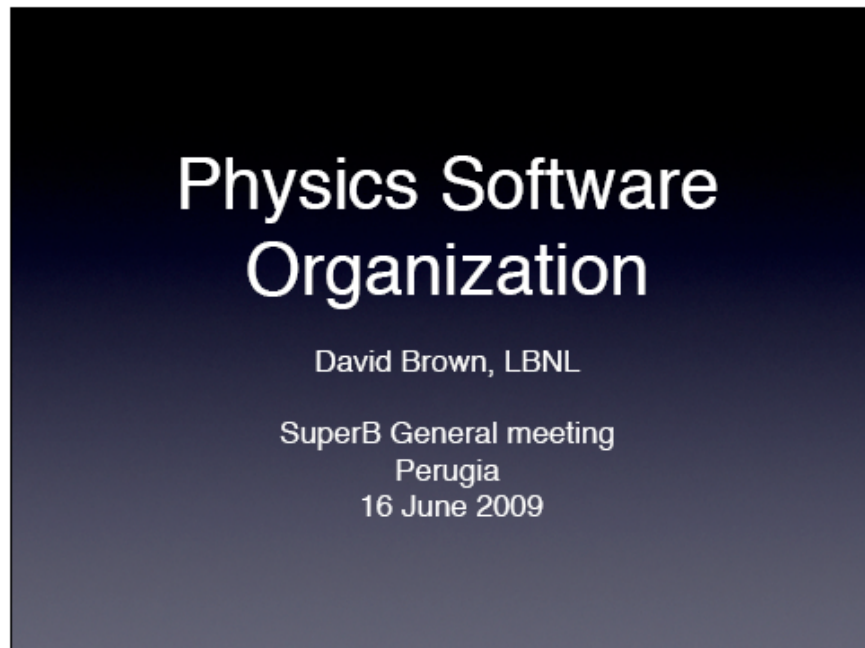
# Interim Report

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- Prepare a physics section for the interim report.
  - Use the LBNL SVN repository as an interim step for this work.
    - All work will be in EOY09.
    - Will add a wiki page for easy access to the latest version.
- Dave Brown is arranging for accounts for all conveners to edit this document.
- Want to update our knowledge of the physics case for SuperB.
  - Particularly highlighting unique features of the programme.
- Deadlines:
  - 1<sup>st</sup> November: Draft ready to circulate to SuperB community for comments.
  - 1<sup>st</sup> December: Draft finalized and ready for circulation outside of SuperB.

# Planning Simulation Production

- Several talks on Monte Carlo production were given in the Wednesday Physics + Computing session.
- In particular look at:



- Aim for a modest production cycle for the October meeting.
- 2<sup>nd</sup> production in 2010 to target TDR work



# Winter Physics Workshop

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- 3 day meeting as a satellite to the December general meeting.
  - To be held in Frascati (details to follow).
  
- Aim:
  - Finalize interim document during the meeting.
  - Plan for TDR work over 2010.
  
- Dates to be confirmed:
  - Will avoid clashes with the interplay workshop at CERN
  - Will avoid thanksgiving.