

Journées Informatique RI3

InDiCo – indico

INDICO@IN2P3



Construction collaborative d'un outil collaboratif



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CENTRE DE PHYSIQUE DES PARTICULES DE MARSEILLE

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LABORATOIRE DE L'ACCÉLÉRATEUR LINÉAIRE

THOMAS BARON, PEDRO FERREIRA

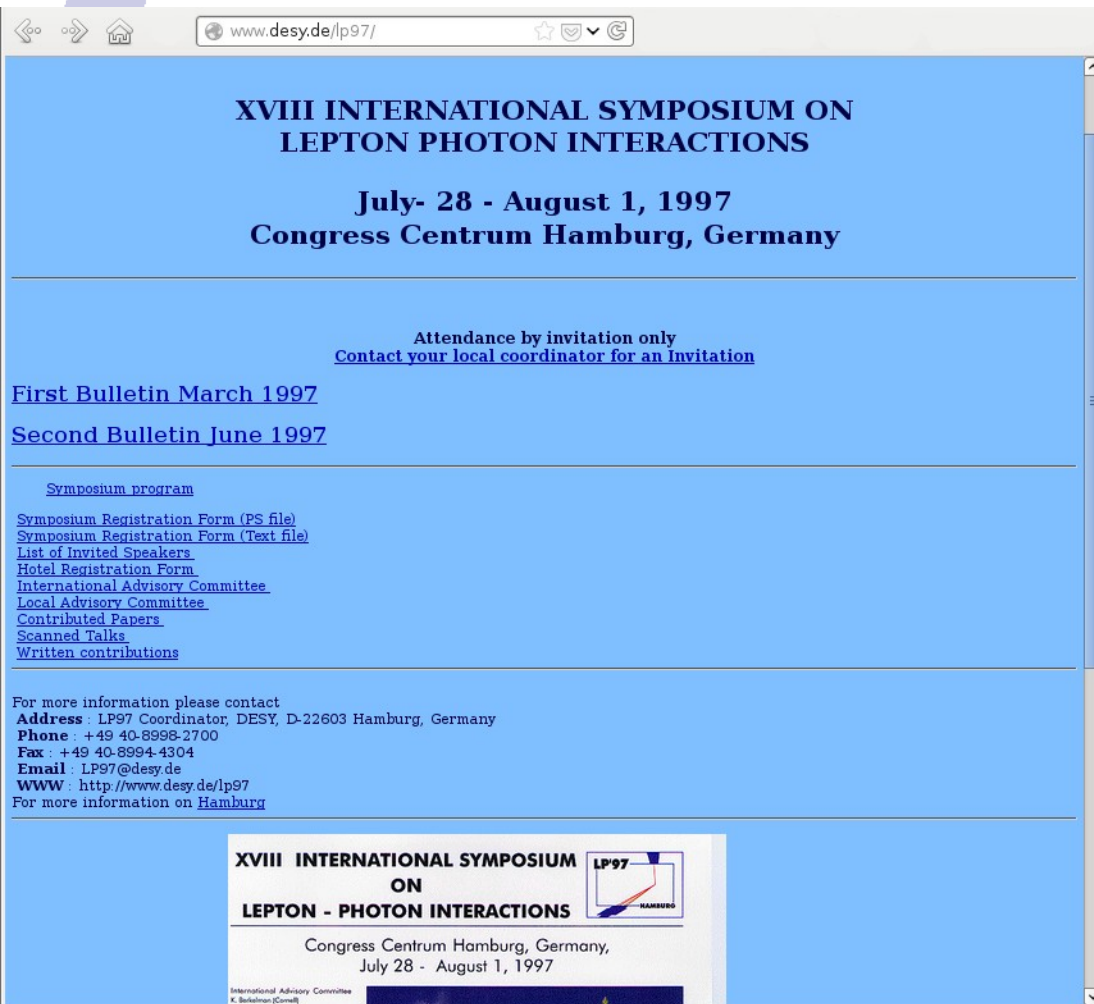
ORGANISATION EUROPÉENNE POUR LA RECHERCHE NUCLÉAIRE

Outline

- **Origines d'InDiCo**
- **Fonctionnalités**
- **Equipe de développement**
- **Fonctionnement collaboratif**
- **Améliorations à venir**

Pré-histoire

- **LP97 – 800 participants**
 - *entièrement traité à la main*
- **Innovations**
 - Annonce sur web!
 - “Ferme” de PCs
 - pour accès internet des utilisateurs (80 postes)
 - gestion des participants (10 + 2 postes)
 - Application MS-Accesstoutes impliquant l'informatique
- **Aucun archivage des présentations / articles**



www.desy.de/lp97

**XVIII INTERNATIONAL SYMPOSIUM ON
LEPTON PHOTON INTERACTIONS**

July- 28 - August 1, 1997
Congress Centrum Hamburg, Germany

Attendance by invitation only
[Contact your local coordinator for an invitation](#)

[First Bulletin March 1997](#)
[Second Bulletin June 1997](#)

[Symposium program](#)
[Symposium Registration Form \(PS file\)](#)
[Symposium Registration Form \(Text file\)](#)
[List of Invited Speakers](#)
[Hotel Registration Form](#)
[International Advisory Committee](#)
[Local Advisory Committee](#)
[Contributed Papers](#)
[Scanned Talks](#)
[Written contributions](#)

For more information please contact
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Phone : +49 40-8998-2700
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WWW : <http://www.desy.de/lp97>
For more information on [Hamburg](#)

**XVIII INTERNATIONAL SYMPOSIUM
ON
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International Advisory Committee
K. Burkhardt (Contact)

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■ Application MS-Access

toutes impliquant l'informatique

■ **Aucun archivage des présentations / articles en amont de SPIRES**

This form can be send by e-mail to lp97@desy.de

Note: If you wish to pay by credit card, this (or the PS-file form) has to be signed and sent by mail or fax to:

DESY -FHL-,
Attn. Mrs. Hildegard Haertel,
Notkestrasse 85,
D-22603 Hamburg
fax: +49 / 40 / 8998-3093

International Symposium on Lepton-Photon Interactions 1997
=====

Registration Form

Name: First Name(s):
Titles: Institute (official name for badge):
Address:

Address before August 97 (if different from above, for bulletin 2):

Address after August 97 (if different from above, for proceedings):

e-mail:

phone number:

fax number:

Did you fill in the hotel reservation form? _ Yes _ No
Accompanying persons _ No _ Yes, ___ persons

Conference fee payment?
_ cash
_ transfer to LP97 bank account
(see bulletin 1)

Credit card payments need a signed registration form to be sent to the organizers by mail or fax (see above)

CDS et naissance d'InDiCo

- **Cern Document Server – Conservation de documents**
- **CDS Agenda (licencié GPL) en 2004 :
10000 événements, 70000 fichiers**
- **“InDiCo workshop” (23 avril 2004, /event/2 !)**
pour annoncer la mise en production d'InDiCo
- **souplesse (conf-session-talk), portabilité,
protection/délégation, comptes/UID
internes+externes, HTML4.0, “Big” conferences**
- **Première grande conférence sur InDiCo : CHEP'04**
- **JI : 1999, 2001, 2004, 2006, 2008, 2010, 2012, 2014**

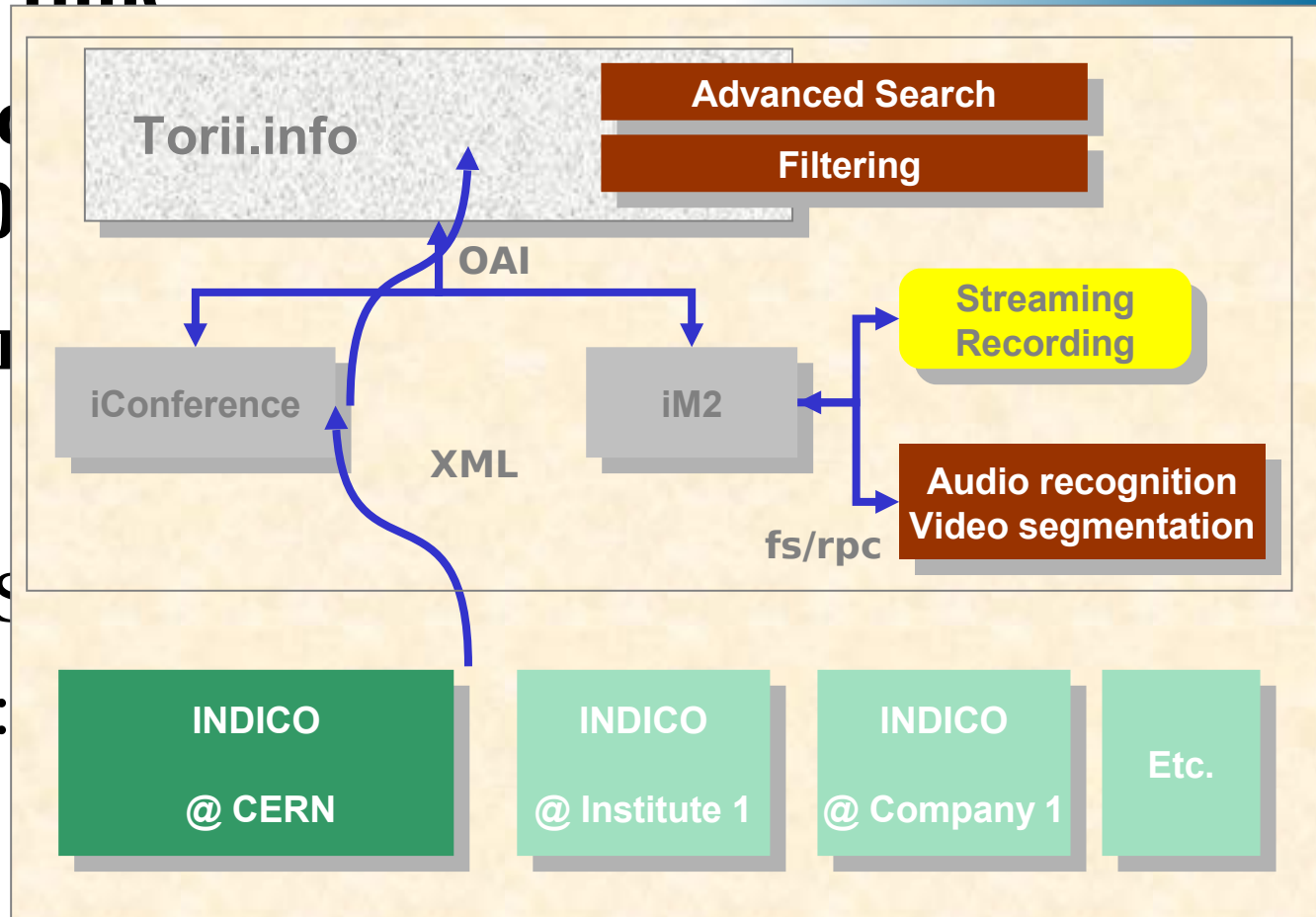


Au départ d'InDiCo

- **26 people involved**
About 13 full time
 - **2 years project :**
From May 2002 to end April 2004
 - **1.6 M euros invested (EU funding)**
 - **5 institutes:**
 - Italy: SISSA, University of Udine
 - Holland: TNO TPD, University of Amsterdam
 - CERN
- **Jean-Yves Le Meur, 2004**

Au départ d'InDiCo

- 26 people involved
About 13 full time
- 2 years project
From May 2008 to May 2010
- 1.6 M euros in total
- 5 institutes:
 - Italy: SIS
 - Holland: ...
 - CERN



Some survive – some do not.

http://torii.info

The screenshot shows the Torii website interface from 2004. At the top, there is a navigation bar with links for LIST, SEARCH, CUSTOMIZE, LOGOUT, and HELP. Below this, a user greeting reads "Hello, marco. Tuesday, 30 March 2004". The main content area features a search bar for "Document ID" and a dropdown menu for "Sector" set to "mySectors". There are also filters for "Browse" (set to "since last List") and "From" (set to "--"). A sidebar on the left contains a "Recommended" section with links to arXiv.org papers, an "InBox" section, and a "Flavons" section with more arXiv.org links. The main content area displays a list of records under the folder "Flavons" (13 records). The first record is "ICTP Lectures on Theoretical Aspects of Neutrino Masses and Mixings" by Mohapatra, R. N., with a submission date of 2002-11-15. The second record is "Theoretical Models of Neutrino Masses and Mixings" by Feruglio, Ferruccio | Altarelli, Guido, with a submission date of 2002-06-07. The third record is "Fermion Masses and Mixings in the Little Flavour Model" by Bazzocchi, F. | Fabbriches, M. | Bertolini, S. | Piai, M., with a submission date of 2003-09-16 and a last revision of 2003-11-26.

■ 2004

The screenshot shows the Torii website interface from 2014. The top navigation bar includes a search bar and a button labeled "Trouver des annonces". The main content area is divided into two columns. The left column, titled "Liens associés", lists various services: Self Storage units, On site Storage units, Domain Web hosting, Mini Storage facilities, Web hosting Reseller plans, Climate Control Storage units, Cheap Web hosting sites, Website hosting, Cpanel hosting, and Storage Facility. The right column, titled "Liens commerciaux", features a large advertisement for "RÉSIDENCE SERVICES SENIORS" in "Proche Montpellier Poussan". The advertisement includes a photo of a modern residential building and a button labeled "CLIQUEZ ICI". Below the advertisement, there is a section titled "ACQUÉRIR LE DOMAINE" with the text "Le nom de domaine torii.info est mis en vente par son propriétaire." and a link to "Privacy Policies".

■ 2014

Technologies au départ

Mostly Open Source (our personal rating)

- **Building blocks:**
 - iM2/iConference: **Java, Apache** (☆☆☆☆), Tomcat. (☆☆☆)
 - MaKaC (“Make a Conference” = InDiCo) : **Phyton**
- **Development tools: Emacs, CVS, NetBeans** (☆☆☆), **Together** (☆)
- **Web presentation layer:**
 - iM2/iConference: **Echo** (☆☆☆) (obj. oriented, browser independent)
 - MaKaC: **taglib**
 - Torii search wrapper: **php** (☆)
 - **OAICat** for OpenArchive server (☆☆☆)
- **Database layer:**
 - **MySQL** (☆☆☆☆)
 - **DBmaintainer** (DB version control, developed by us)
- **Persistence: Torque** (☆) o **ZopeDB**
- **Audio/Video conversion and streaming :**
open source libs: ffmpeg, etc.

➤ **Marco Fabbrichesi, 2004**

“Major issues” – Design

➤ Jean-Yves Le Meur, 2004

- ⊗ Variety of document types related to conferences
- ⊗ Variety of actors involved in Conferences
- ⊗ Difficulty in management of multimedia material
- ⊗ Richness of conference types (processes, structure, size, management, workflow...)

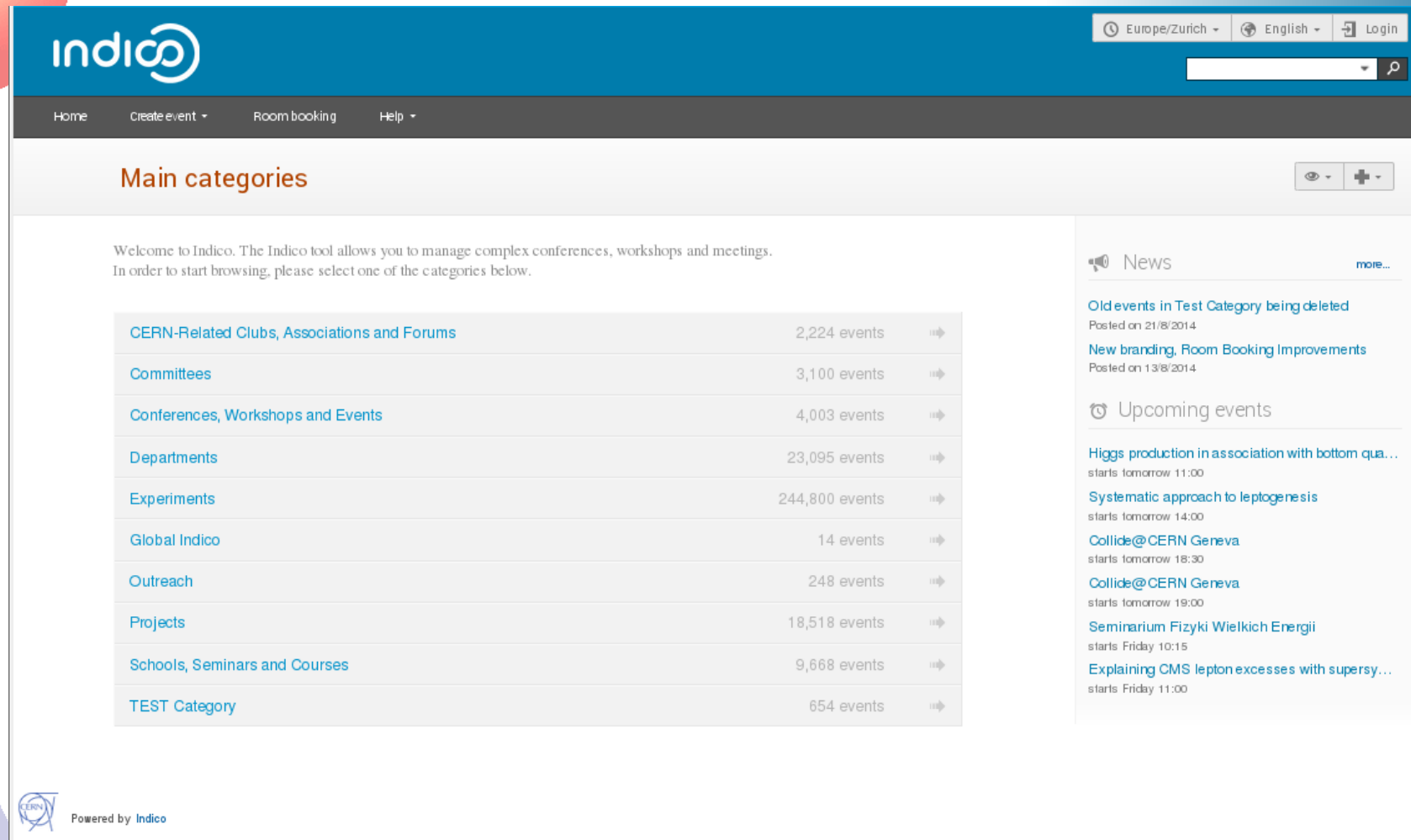


➤ Antoine Vivet,
Longue-Vue

Fonctionnalités – aujourd'hui

- **Événements**
 - Conférences (colloques), meetings (réunions), séminaires (« conférences »)
- **Utilisateurs**
 - Natif, LDAP, SSO, “CERN”
 - Rôles : organisateur, président de séance, orateur, participant
- **Intégration aux services accessoires**
 - Webcast, enregistrement, visioconférences (Vidyo, SeeVogh, ...) spécifiques au CERN
 - Gestion/réservation des salles
 - Indexation / recherche
 - API d'exportation multi-standard (XML, ICS, JSON, ...)

indico.cern.ch



The screenshot displays the Indico website interface. At the top, there is a blue header with the Indico logo on the left and navigation links for 'Europe/Zurich', 'English', and 'Login' on the right. Below the header is a dark navigation bar with links for 'Home', 'Create event', 'Room booking', and 'Help'. The main content area is titled 'Main categories' and includes a welcome message: 'Welcome to Indico. The Indico tool allows you to manage complex conferences, workshops and meetings. In order to start browsing, please select one of the categories below.' A table lists various categories with their respective event counts. On the right side, there is a 'News' section with a 'more...' link and an 'Upcoming events' section listing several events with their start times.

indico Europe/Zurich English Login

Home Create event Room booking Help

Main categories

Welcome to Indico. The Indico tool allows you to manage complex conferences, workshops and meetings. In order to start browsing, please select one of the categories below.

CERN-Related Clubs, Associations and Forums	2,224 events	→
Committees	3,100 events	→
Conferences, Workshops and Events	4,003 events	→
Departments	23,095 events	→
Experiments	244,800 events	→
Global Indico	14 events	→
Outreach	248 events	→
Projects	18,518 events	→
Schools, Seminars and Courses	9,668 events	→
TEST Category	654 events	→

News

[Old events in Test Category being deleted](#)
Posted on 21/8/2014

[New branding, Room Booking Improvements](#)
Posted on 13/8/2014

Upcoming events

[Higgs production in association with bottom qua...](#)
starts tomorrow 11:00

[Systematic approach to leptogenesis](#)
starts tomorrow 14:00

[Collide@CERN Geneva](#)
starts tomorrow 18:30

[Collide@CERN Geneva](#)
starts tomorrow 19:00

[Seminarium Fizyki Wielkich Energii](#)
starts Friday 10:15

[Explaining CMS lepton excesses with supersy...](#)
starts Friday 11:00

Powered by Indico

Versions

- **0.4 – 07'04 “First stable release”**
- **0.8.13 – 02'06 Registry fields edit, WYSIWYG pages, access ctrl.**
- **0.8.14 – 03'06 Registry, Abstracts, Rooms**
- **0.90.3, 0.90.2 – 08'06 Authors, Excel, UTF-8, ...**
- **0.92.1 – 02'07 Badges, Upgrade + dependencies**
- **0.92.2 – 04'07, 0.96.2 – 06'08, 0.97b – 01'10,**
- **02'10 : 86 installé sur 86 serveurs connus dans le monde (2014 : 111)**
- **0.97rc1 – 06'10, 0.97rc2 – 10'10**
- **0.97.1 – 06'11, *Milestones* (jalons) gérés dans Trac**
- **0.98rc1 – 12'11, 0.98 – 03'12, 0.98.1 – 04'12, 0.98.2 – 06'12**
- **0.99 – 12'12**
- **V1.0 – 05'13 (git tag v1.0), Outlook, Timetable, Abstracts, Rooms, API**
- **“Vote for tickets” – sans beaucoup de succès**
- **1.1 – 09'13, Dashboard, API, Paper review**
- **1.2 – 07'14 (+6 mois), puis « gel » en v1.9**
pour raison de changement de technologie de la base de données

Développeurs

- Le CERN a renforcé l'équipe de nouveau depuis environ 2011












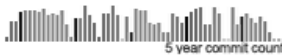

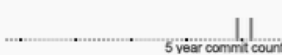

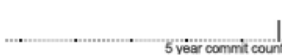


- Liste officielle

- Thomas Baron (2004-)
- José Pedro Ferreira (2007-)
- Alejandro Avilés (2013-)
- Iason Andriopoulos (2013)
- Tommaso Papini (2013)
- Adrian Monnich (2014-)
- Ilias Trichopoulos (2014-)

- Developpements

ponctuels externes pour : LDAP, Timezones, ...

- Milestones défini jusqu'à 2.9

Name	Kudos	12 Month Commits	All Time Commits	5 Year Trend	Primary Language	First Commit	Last Commit
 Adrian Moennich	8	715	1798		Python	almost 4 years ago	12 d
 Alejandro Avils	8	534	781		Python	over 1 year ago	19 d
 Pedro Ferreira (Developer)	8	248	1720		Python	over 5 years ago	12 d
 Alberto Resco Prez (Software Engineer)	8	241	979		Python	over 3 years ago	6 m
 Ferhat Elmas	7	208	208		Python	12 months ago	7 m
 jbenito (Project manager)	8	124	1051		Python	over 5 years ago	3 m
 OmeGak	6	22	22		HTML	10 months ago	7 m
 Jacques Dafflon	6	10	10		Python	about 1 month ago	26 d
 Ilias Trichopoulos	6	9	9		Python	2 months ago	abo ago

Communauté

- **209 abonnés « administrateurs »**
project-indico-administrators@cern.ch
- **“First InDiCo Workshop”** 27-29 mai 2013
<http://indico.cern.ch/event/235520>
- **“First InDiCo Virtual Event”** 4 février 2014
<http://indico.cern.ch/event/287271>
- **Grand intérêt (GSI, OPM, IN2P3, ...),
mais peu de ressources pour contributions
propres. L'équipe du CERN est soumise aux
prérogatives émanant du CERN.**

Infrastructure communautaire et outils en 2014

- **Workshop(s) au moins annuels**
- **Listes de diffusion** (egroups.cern.ch)
- **Suivi de problèmes (tickets)**
 - Savannah, Trac, **GitHub** (depuis 2014)
- **Gestion de projet**
 - Transfert partiel de Trac vers GitHub (prb. Wiki)
- **Suivi de versions**
 - CVS, SVN, git (github.com/indico)
- **Debug** : indico_shell
- **Cadriciel** : mod_python - mod_wsgi
- **Internationalisation** : transifex.com
- **Métriques** : openhub.net (*anciennement* ohloh)

550k lines
(20%cmt)
54% python
28% JavaScript

Activités et projets

- **Mainline (CERN): Remplacement de ZopeDB par une interface SQL (« v2.0 », 2015)**
- **Amélioration de l'interface utilisateur (“UX”)**
- **Internationalisation**
- **Sur le radar : InDiCo@RENATER (avec SSO fédération ?)**

Exemple : *i18n* (n'est pas *l10n* !)

- **4798 chaînes de caractères en anglais**
 - de/it : 100% traduits, 0% validés
 - fr : 98% traduits, 16% validés (CH, TB, DH)
 - es, ru < 60%, sk, tr, pl, po < 8% traduits
- **Pas toutes les chaînes répertoriées**
- **Programmation pas orientée *i18n***

```
["Registrant A",  
"Registrant B",  
"Registrant C"]
```

```
["Mon", "Tue",  
"Wed", ...]
```

```
s="Registrant %s"  
[s%"A", s%"B", s%"C"]
```

```
import datetime  
[datetime.date(1967,7,9+i).  
strftime("%a") for i in range(7)]
```

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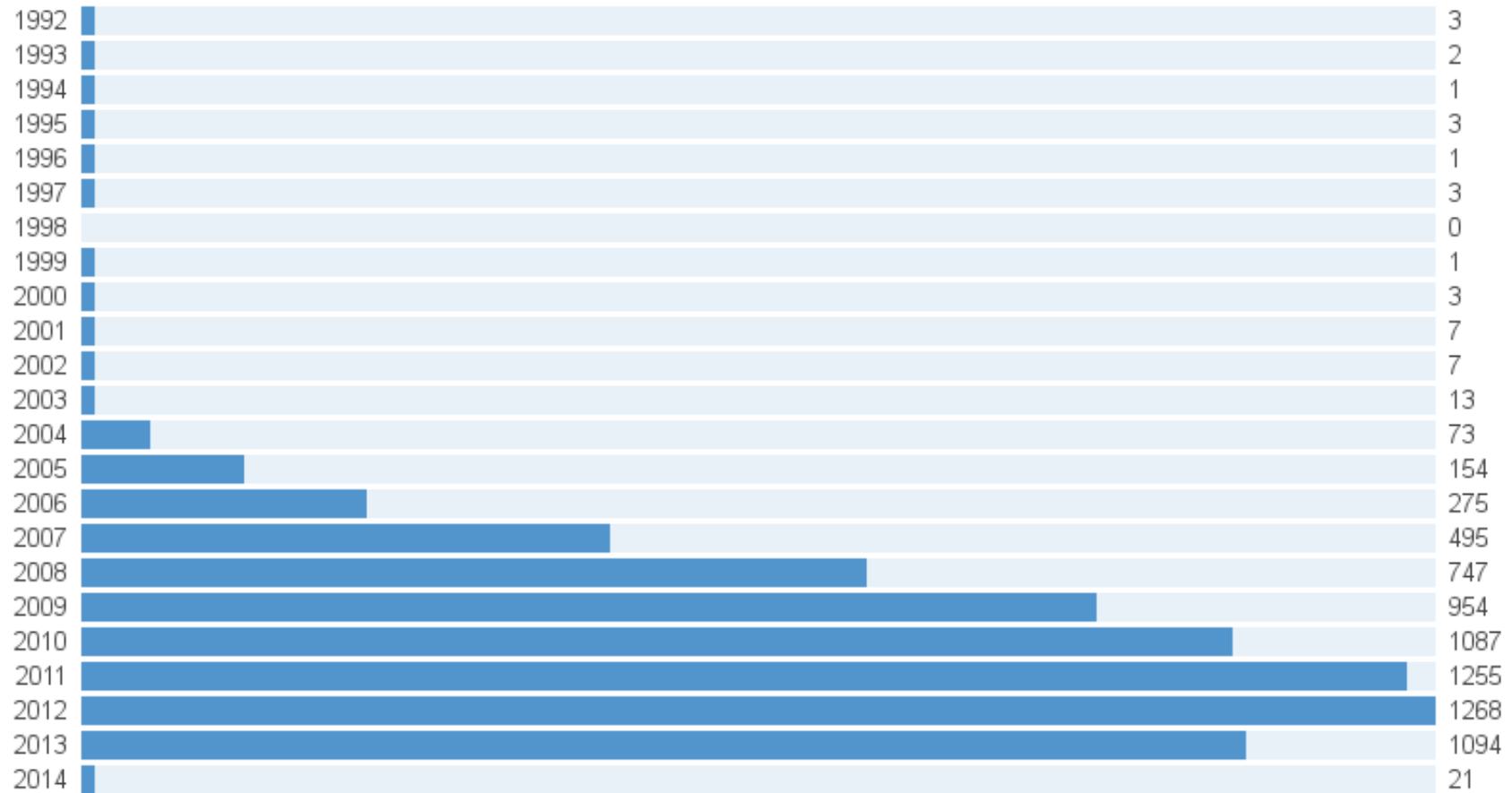
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 - Meeting = réunion
 - Review = ?
 - Referee = ?
 - Abstract = ?

InDiCo@IN2P3

- **V1.2 en production**
- **Gestion indépendante des utilisateurs (pas de LDAP, oupiou ou SSO)**
- **Support (panne, erreur, perte de données) sur “best effort base” (?)**
- **+ InDiCo@LAL + InDiCo@LPSC + ?**
- **9008 événements le 16 octobre 2014, tendance croissante**
- **2 participants réguliers aux événements communautaires**

InDiCo@IN2P3

Année



Total: **7468**

Alternatives sur le marché

➤ Jean-Yves Le Meur, 2004

© Commercial

- © Eveni: <http://eveni.com>
- © Suvisoft: <http://suvisoft.fi/> Corg software
- © Conference.com: <http://conference.com>
- © Softconf: <http://softconf.com> Start software

© Freeware

- © CyberChair: <http://www.cyberchair.org/>
- © Open Conference System:
<http://www.pkp.ubc.ca/ocs/>
- © Zakon Group LLC: <http://www.openconf.org>
Openconf

CDS Agenda <http://agenda.cern.ch> CERN

- © *And lot of home-made apps...*

■ 2014

- InDico
- SciencesConf.org
- phpMyConf
- « JRES »
- SharePoint !
- ...

Conclusion

- **Un projet intéressant, sur le point technique, socio-managérial et financier**
- **A su s'imposer au CERN, puis au-delà**
- **Souffre d'une barrière psychologique auprès du personnel non-informaticien (et non-physicien)**
- **Et vous ?**
 - Quels sont vos besoins les plus urgents dans InDiCo ?
 - Comment pouvez/voulez -vous contribuer ?

Il est bien connu que les physiciens ont un seuil de frustration très élevé.