Procedures

The process of producing the *Review of Particle Physics*

Procedures

Literature Search

Complete Literature Search by two people of 20 journals (650 papers per edition predominantly from PL, PRL, PR and EPJ)

Enter Literature search results in database

Distribute assignments of papers to Encoders and Overseers

Procedures

Encoding

Each Paper Read Carefully by Two People: by encoder and by overseer

Encoder and Overseer initiate data entry

Encoding data entered into database: Sections have very different formats

Create new sections, delete sections, reorganize/combine sections

Procedures

Reviews

Write/edit Reviews describing content of and/or problems in a given section

Referee each review and note (3-5 referees)

Place reviews into system so can produce book and web versions

Procedures

Final processing

Edit all sections for consistency, errata, quality, etc.

Request Verification of every entry from each experiment

Enter corrections/changes from Verifications

Calculate Averages, Fits and Best Limits.
Many of these are unique by section

Prepare Summary Table

Prepare Conservation Laws table (with impact on Listings and Summary Table)

Procedures

Production

Post Listings and Reviews on web

Produce 1344-page book of Summary Tables, Listings, Reviews

Produce web versions of everything in book

Produce 320-page Booklet with Summary Tables and abridged version of reviews

Quality Assurance

The HEP Community and many others depend on us for accuracy and integrity

Quality Assurance

All reviews have 3-5 referees.

Every item of data that is entered is checked by the experiments (700 people help).

PDG Advisory Committee reviews all PDG operations

We strive to only report what is a fair consensus of the community.
E.g.- For the growing B sections, the three encoders are from Belle, BaBar, and Tevatron.

We invite comments from the collaborations on many sections.

We organize mini-workshops when we need to consider expanded and improved coverage of a section (such as D mesons, B mesons, neutrinos, tau leptons, CKM, extra dimensions, ...)

PDG Advisory Committee

Hiroaki Aihara – Chair	**(U. of Tokyo)**
Gustaaf Brooijmans	**(Columbia)**
Patrick Janot	**(CERN)**
Deborah Harris	**(Fermilab)**
Gilad Perez	**(Stony Brook)**

PDG Advisory Committee

Chosen by Director of LBNL Physics Division (James Siegrist) except for CERN member

(who is chosen by the CERN Director General)

- **Hiroaki Aihara –** Spokesperson of Belle
- **Gustaaf Brooijmans –** Young Experimentalist in ATLAS
- **Patrick Janot –** CERN, CMS Experiment
- **Deborah Harris –** Project Manager of MINERvA. Also in: NuTeV, MINOS
- **Gilad Perez –** Outstanding young Theorist

Distinguished Members of Past Advisory Committees

Peter Zerwas

Taka Kondo

Michael Turner

Michel della Negra

Jonathan Dorfan

Ann Kernan

Lincoln Wolfenstein

Gary Feldman

Rudiger Voss

Persis Drell

Dieter Schlatter

Paul Langacker

Mark Wise

Stephen Ellis

Chris Quigg

Mike Whalley

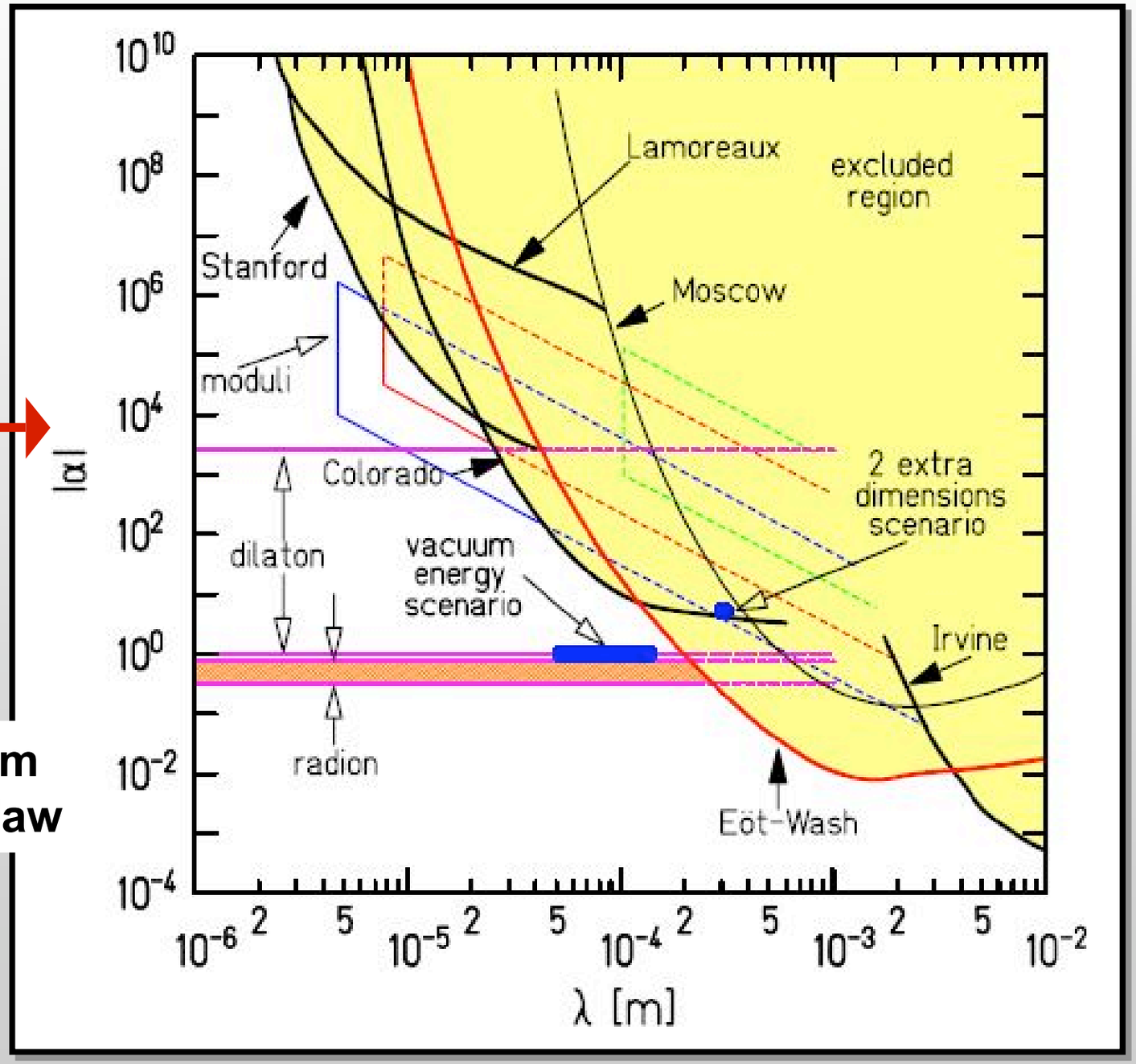
Jonathan Rosner

Fred Gilman

Vital PDG Workshops

Workshops lead to improved coverage

- Neutrino
- CKM
- D Meson
- τ lepton
- Extra-dimensions
- Statistics



Constraints on deviations from Newton's gravitational force law

Collaboration with Working Groups

Coordination with working groups at

LEP, Tevatron and B-factory on:

- **Electroweak fits,**
- **B lifetimes, B mixing,**
- **V_{cb} and V_{ub}**
- **top quark mass, etc.**

PDG role in:

- **CKM workshops (CERN 2002, Durham 2003, San Diego 2005)**
- **Statistics workshops, etc.**