Guidelines for presentation of CALICE results

Version 1.2 ; May 2011

Until the end of 2006, CALICE operated a liberal policy for presentation of talks at conferences and workshops, which involved no procedure for the approval of material to be presented. Since summer 2006, much of the focus of conference talks has moved to analysis results based on the test beam data which should be regarded as the common property of the whole Collaboration. From the start of 2007 we therefore introduced procedures for approval of results and talks. These are intended not to be too onerous, but should ensure that consistent results of high quality are presented to the public.

The guidelines about approval of results apply only to presentations which include the performance of the prototypes placed in the test beam, and the analysis of test beam data. Technical talks, such as those on hardware R&D or simulation, are not subject to approval by the Collaboration.

CALICE Notes

The following types of CALICE notes are envisaged:

- **CALICE Technical Notes.** These notes are internal to the Collaboration, and the results shown therein may not be presented outside. Any member of the Collaboration can, and is encouraged to, document their work in this way.
- **CALICE Analysis Notes.** These notes document *preliminary* analysis results approved for presentation to the outside world. A CALICE Analysis Note should be authored by "The CALICE Collaboration", without a detailed author list. It may optionally refer to a corresponding author, who may be contacted for further information. An Analysis Note should carry the following disclaimer on the title page:
  "This note contains preliminary CALICE results, and is for the use of members of the CALICE Collaboration and others to whom permission has been given."
  An Analysis Note may be, but does not have to be, made publicly available, for example as a contributed paper to a conference. This is at the discretion of the Speakers' Bureau in consultation with the authors and Editorial Board. Such a note would bear the shorter disclaimer:
  "This note contains preliminary CALICE results."
  A CALICE Analysis Note *may* also contain background information for the benefit of the Collaboration which is not intended to be publicly shown. In this case, such material should be placed in appendices clearly labelled "*CALICE internal only – not to be shown publicly"* We then have the option to strip out the appendices if we wish to show the note to someone outside the Collaboration.
- **CALICE Publications.** These contain final results for publication.

Authors of CALICE Publications and of publicly available Analysis Notes are expected to adhere where possible to the style guidelines in the Appendix below. Authors of other

Analysis Notes are encouraged to adopt the same standards, though in these notes, clarity and correctness of the analysis are more important than the standard of English.

Conference presentations

The following remarks apply equally to seminars, talks or poster presentations.

- Members of CALICE may be invited to give talks or posters on behalf of the Collaboration by the Speakers' Bureau. Alternatively, they may make their own arrangements to give a talk; in this case they should take care to inform the Chair of the Speakers' Bureau.
- The current members of the Speakers' Bureau are David Ward (Chair), the Spokesman and two members elected by the Steering Committee (as of May 2011 these are Jean-Claude Brient and Jose Repond).
- The Speakers' Bureau consults regularly with the Technical Board in order to collect candidate names for conference presentations.
- The Speakers' Bureau may consult the Steering Board when appropriate, for example ffor the nomination of speakers for high profile talks like major annual HEP conferences.
- The only results permitted to be shown in CALICE talks are those which have been approved via the procedure outlined below. CALICE speakers are encouraged to include the CALICE logo in their talks. All results and figures should be labelled "CALICE Preliminary", or just "CALICE" in the case of published results.
- All CALICE speakers are required to make their slides available to members of the Collaboration in advance. The Collaboration will be informed by email (to `calice@jiscmail.ac.uk`), with ***at least two working days allowed for comments*** before the start of the meeting at which the talk is to be given.
- All CALICE speakers are recommended to give a practice talk. This is *mandatory* for students and post-docs, and *strongly encouraged* for more senior people. In the case of major meetings at which several CALICE talks are given, a CALICE-wide phone meeting should be convened for this purpose by the Physics and Analysis coordinators; for smaller meetings the leader of the group to which the speaker belongs is responsible for arranging a practice talk.
- Results to be shown in Review Talks (whether by CALICE speakers or otherwise) are subject to the same conditions as for talks given on behalf of CALICE. In other words, only CALICE material approved by the procedure outlined below may be shown. Of course a non-CALICE speaker can not be expected to give a practice talk or required to make their slides available.
    - New results for presentation based on data recorded using the test beam prototypes must be approved by the Collaboration by the following procedure. **Results which have not been approved before the scheduled presentation at the conference cannot be shown.** In this context, **"**test beam results" is deemed to include essentially all material about the detectors (hardware, performance, calibration procedures etc.) once the detectors have been integrated into the test beam setup.
    - A CALICE Analysis Note should be produced outlining the analysis method, including tables of numerical results and/or figures as appropriate. The note

should be clear enough that another member of CALICE can understand what was done and would be able, if they so desired, to reproduce the essence of the analysis.

- An analysis suitable for writing up in this form should normally have been already presented to the Collaboration at least once in either a CALICE general meeting, or analysis meeting.
- When you are ready to start writing a note, you should contact the Chair of the Speakers' Bureau, who, in consultation with the other members of the SB, will set up a small editorial group of CALICE colleagues (typically about three people), the Editorial Board, whose task will be to scrutinise the work, maybe suggest improvements, and report eventually that they believe it to be reliable.
- The Chair of the Speakers' Bureau will regularly consult with the Steering Board to collect proposals for Editorial Board memberships.
- A draft note should be produced ***at least two weeks before the meeting*** at which the results are to be shown. The draft should be sent to the editorial group, who will liaise with the authors until they are satisfied with the work. A longer lead time is desirable otherwise there is no guarantee that your results will be approved in time. Email correspondence during the editorial process should include all members of the editorial group, and at least one member of the Speakers' Bureau. It is useful to keep a record of the correspondence, and for this purpose a web page will be set up by the analysis coordinators.
- The whole Collaboration should then have an opportunity to comment on the note; this may be done by circulating the note **allowing a working week for comments**, specifying an explicit deadline for the receipt of comments, or by presenting the work in a talk at an advertised CALICE meeting.
- The Editorial Board should oversee the process of responding to comments, providing advice to the authors, and ensuring that comments from the Collaboration are taken into account. Finally they should report to the Speakers' Bureau that the note is ready for public presentation. The final note should then be sent to the Chair and members of the Speakers' Bureau. After approval by the Chair (or the Spokesperson) it is to be stored on the web, and an email should be sent to the Collaboration to notify everyone.
- Other materials such as photographs, event display pictures, plots to illustrate data taking rates, event displays etc. subject to the same procedure, but in some cases a web page rather than a note might be appropriate, e.g. to contain a collection of pictures. The most important thing in such cases would usually be to document the material clearly. In this case the editorial process would probably be rather minimal.
- A more liberal attitude may be taken to results presented, for example, by students in national physical society meetings, so long as the student presents this as their own work, making it clear that this does not necessarily represent the Collaboration's official position. The Speakers' Bureau should still be consulted, and would normally encourage the student to present approved material only.

- Unapproved results may occasionally be presented confidentially if it is essential to help support national funding reviews. The Speakers' Bureau should be informed in advance such a case.

Publications

When one or several members of CALICE are ready to write a paper based on CALICE beam data, the following procedure should be followed:

- When you start writing a paper, you should contact the Chair of the Speakers' Bureau, who, in consultation with the other members of the SB, will set up a small editorial group of CALICE colleagues (typically about three people), whose task will be to scrutinise the work and its presentation, maybe suggest improvements, and report eventually to the SB that they believe it to be ready for publication.
- Once the authors have a draft paper available, they should send it to the editorial group, who will liaise with the authors until they are satisfied with the work. Email correspondence during the editorial process should include all members of the editorial group, and at least one member of the Speakers' Bureau. It is useful to keep a record of the correspondence, and for this purpose a web page will be set up by the analysis coordinators. .
- The paper should then be made available to the whole Collaboration for a period of two working weeks, for anyone to comment, specifying an explicit deadline for the receipt of comments. The authors are expected to respond to the suggestions from colleagues. The Editorial Board should oversee this process, providing advice to the authors, and finally they should report to the Speakers' Bureau that the paper is ready for submission to the journal.. During this process, the authors may seek advice from Speakers' Bureau as appropriate.
- Once the reviewers report that all interested parties are satisfied, the Chair of the Speakers' Bureau will arrange with the authors for submission to the journal and arXiv.

Appendix : CALICE Conventions for Writing Papers
Version 1

This appendix serves as a basis for standardisation of CALICE reports and publications. Collaborators are urged to use the standards for internal reports but are required to do so for publications and publicly accessible notes. The standards also assume papers will be written with LaTeX.

1. CALICE

   a. The collaboration name is “Calorimeter for the Linear Collider Experiment” and shall be abbreviated as “CALICE” in capital letters

   b. CALICE notes documenting approved preliminary results for conference presentations should not include an author list, but should be labelled "The CALICE Collaboration". They should contain on the title page the disclaimer:
   "This note contains preliminary CALICE results, and is for the use of members of the CALICE Collaboration and others to whom permission has been given."

   c. CALICE papers intended for publication should be labelled "The CALICE Collaboration", followed by the full author list, i.e. all members of CALICE.

2. Figures

   a. At the beginning of a sentence, use the word "Figure." Within a sentence use "Fig.\ " and not "fig.," "Fig," etc. (The slash after the full stop tells TeX that it isn't the end of a sentence and so it leaves less space.)

   b. When there are an "a" and a "b" figure, they should be referred to as "Fig. 9(a)," and "(a)" and "(b)" should be used in the caption and in the figure.

   c. When printed at publication size, all capital letters in figures must be at least 2 mm high. Use no more than two differently-sized fonts in a figure.

   d. All of the figures in a paper should "match" --- i.e. use the same font (and size of font for figures that are the same size), consistent line weights, etc.

f. Figures may be in color, but must be understandable when printed in black and white (e.g. by use of different symbols, line styles, shadings as well as colour).

g. The backgrounds of all figures must be transparent, not gray.

h. Prepare your figures at publication size. This is much better than making them oversized to start with and then reducing them, especially if you use any shading. One-column width for AIP publications is 8.5 cm (1.5 or 2 column figures may be used if necessary).

i. Approved figures, such as those shown at a conference or workshop, containing CALICE data must carry the label “CALICE Preliminary”. Figures for publications containing CALICE data must carry the label "CALICE".

The use of the following statements in `root` is recommended in order to achieve a reasonable uniformity of style:

```
gROOT->SetStyle("Plain");
gStyle->SetPalette(1);
gStyle->SetPadTickX(1);
gStyle->SetPadTickY(1);
gStyle->SetLabelFont(42,"xyz");
gStyle->SetTitleFont(42);
gStyle->SetTitleFont(42,"xyz");
gStyle->SetStatFont(42);
gROOT->ForceStyle();
```

3. Tables

Tables containing columns of numbers with errors should be aligned on the \pm. This can be accomplished as follows:
Use "r@{$\,\pm \,$}l" in the \begin{tabular} command. Then the number and the uncertainty go in two separate columns.
Use \multicolumn{2} in the heading for any entries that do not use the \pm.

4. Punctuation

a. Dates should be given as "April 1961" rather than "April, 1961."

b. The dash, when used as an article of punctuation (e.g. "the measurement is a disastor --- we messed it up"), should use the triple hyphen in ordinary (not math) mode. Dashes are fairly casual and should not be used too often.

c. Use a double hyphen to indicate a range: "5--10."

d. Plurals of acronyms should not have an apostrophe (e.g. "MIPs").

e. Quotation marks are placed after commas and full stops, and before colons and semi-colons.

f. New or special usage calls for quotation marks around the word or phrase (e.g. ``non-standard" model, ``anomalous" couplings). Do not use quotation marks around standard nomenclature.

g. Always use the left quote characters `` to open quotes and right quote characters " (not the double quote ") to close quotes. Use double quotes, ``droopy drawers," in preference to single quotes.

h. The possesive of something belonging to two people should have "'s" after the last person's name (e.g. "Ward and Blazey's silly style guide")

i. Be consistent in the use of a comma before "and" or "or" in a series of three or more. You must use a comma before "and" and "or" if the item before the "and" or "or" is more than one word.

5. Particle names

a. Particle names should be in upright, not italic font. For example, e$^-$ or e^-, not e^-.

b. Use the conventions of the Particle Data Group.

6. Symbols

a. All variables should be italic (i.e. in math mode). Subscripts or superscripts should be italic if they are variable indices (e.g. p_x), but in upright (roman) font if they are labels (e.g. $E_{\mathrm{meas.}}$).

b. Momentum is a lower case p. Transverse momentum is a lower case p with an upper case roman T subscript: p_{T}.

c. Energy is an upper case E.

d. Trigonometric functions should be in roman type. Natural logarithm should be "ln" and log base 10 is "log"; both are in roman script. When in math mode, use \ln, \sin, \log_{10} (the base should be

specified), etc.

7. Units

   a. All units should be written in roman script.

   b. We recommend that masses be given in "GeV/c^2." If you choose to leave the c's out, be completely consistent.

   c. We recommend that momentum be given in "GeV/c." If you choose to leave the c's out, be completely consistent.

   d. Add the word "events" as the unit when quoting the number of events (i.e. "the resulting background is 4.0 +/- 1.3 events").

8. Word combinations

   a. "Monte Carlo" is two words, both capitalized.

   b. "Cross section" is two words, capitalized only at the beginning of a sentence.

   c. Compound adjectives should contain a hyphen if the sentence is clearer with the hyphen than without it. Do not use a hyphen if one of the modifiers is an adverb ending in -ly.

9. Miscellaneous

   a. Spell out whole numbers when the number is less than or equal to twelve (i.e. "four jets" instead of "4 jets"), when the number is a short word (twenty, thirty), and when the number is at the beginning of a sentence. (Never start a sentence with a numeral!)

      Exceptions are when there is a list of numbers, some larger than ten, when the number is used as a noun, and when the number is a measurement followed by a unit.

   b. Program names and other acronyms should be written in upper case letters, in smaller point size than the text: "We used {\sc geant}4 to ...." Note that "geant" is written in lower case letters!

   d. Use the roman font for "e.g." and "i.e."

   e. Always say “International Linear Collider” which may be abbreviated as “ILC”

f. Confidence level is abbreviated "C.L." - it does not need to be defined.

f. No hyphen in preselection, reweighting etc.

h. The first word of the paper's title should be capitalized. Following words are capitalized only if they are proper nouns (e.g. someone's name) or abbreviations requiring capitalization (e.g. TeV).

i. Say “minimum ionizing particle” abbreviated as “MIP” (with capital letters.)

j. Use the phrase “silicon photon detectors” for general reference to such devices. Capitalize all the letters in the acronyms for specific devices (e.g. SIPM, MRS, MPPC…)

10. Spelling

a. Either British English usage (e.g. "centre", "-ise") or American usage ("center", "-ize") may be used according to the preference of the main authors, but must be used consistently throughout the paper.

11. References

a. CALICE reports are not to be referenced in papers destined for publication, unless submitted as a laboratory technical note.

b. We recommend the use of et al. when there are more than four authors.

c. Different journals use different formats for references. Check the usage in the journal you are aiming for.