

RANDALF-II new proposal 2016



LINEAR COLLIDER COLLABORATION



RanDaLF

Detector R&D for a future Linear Collider Facility

(T. Behnke, P. Burrows, J. Fuster, M. Stanitzki)



RanDaLF (Detector R&D for a future Linear Collider Facility)

Total score received: 73,2 / 100 (Threshold 70)

Criterion 1, Excellence (3,3 / 5.0; w: 50% of total score) (*between good and very good*)

Criterion 2, Impact (3,9 / 5.0; w: 30% of total score) (*between good and very good*)

Criterion 3, Implementation (4,2 / 5.0; w: 30% of total score) (*between very good and excellent*)

Summary of main criticisms:

- **C1:**

1. Added value of proposed activity not clear, with respect to other work already being performed by the LC community
2. Lack of industry participation
3. Common work among groups not well explained/described
4. No scientific case for ILC well described

- **C2:**

1. ILC/CLIC no yet approved. Risk of community to disappear before end of project
2. Use of detector R&D beyond particle physics
3. Impact description too generic

- **C3:**

1. Too wide scope for WP2
2. Improve risk mitigation



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Main issues to solve and to be included in a view of future new application:

- **C1:**
 1. Show the added value of this project with respect to already existing activities:
 - Define original activities only performed under RANDALF-II and only possible by a cooperation Europe-Japan-US/SLAC);
 - Important to show that the work developed follows recommendations from European bodies and MEXT;
 2. Include industrial participation (creation of a group to develop this possibility);
 3. Make more clear the relation and common work between the groups Europe-Japan-US/SLAC;
 4. Make more explicit the physics case of the LC;

- **C2:**
 1. Stability of the activity: define goals and work plan towards next update of the European Strategy;
 2. Try to define the work more in synergy under the scientific defined programmes of: ECFA, CERN, DESY, KEK;
 3. Get formal support for the work to be developed in RANDALF from above Institutions. Get their recognition of RANDALF-II as useful tool to achieve their strategic plans;
 4. Include “applications” of technologies in other experiments and specially beyond particle physics;

- **C3**
 1. Extend the scope and activities to ILC and CLIC (others: FCC and CEPC ?);



Work package No	Work Package Description	Activity Type	Number of person months involved	Start month	End Month
1	Management, Communication and Outreach	Management and Dissemination	8	1	48
2	Development of technologies for modern detectors in particle physics at future electron positron colliders	Research	283	1	48
3	Investigation and development of possible physics scenarios which will have an impact on the design of future electron positron colliders	Research	108	1	48
4	Software tools and data handling	Research	39	1	48



Work Package leaders

1	Ties Behnke, Marcel Stanitzki, Philip Burrows
2	Felix Sefkow, Maxim Titov
3	Jenny List, Roman Poeschl
4	Frank Gaede, Andre Sailer

Agreed to continue coordinating the work packages for the next submission.

Coordination team: Regular meetings every two weeks

Individual groups:

- Update documentation of their groups;
- Re-evaluate number of months requested;
- Prepare new letters from hosting labs/Universities.

Documents kept at SVN repository at DESY (Ties)



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Proposed Agenda 2016:

1. **January 26th**: Organize working groups to prepare the new proposal.
2. **End-February**: First draft (V0) of the document to be circulated and get input from groups with updated information from each group.
3. **Mid-March**: Deadline for comments.
4. **End-March**: Production of new draft of the document (V1).
5. **April 8th**: Deadline for comments on version V1.
6. **April 15th**: Production of new draft of the proposal (V2).
7. **April 22th**: Final version of the document.
8. **April 28th**: Deadline.

Meetings among all participants are expected after each version being released.

Meeting among working group coordinators are foreseen every two weeks.