Construction notes: My (DBN) notes are in red. The notes from the CRM template are in orange. All these are to be redacted before submission.

# Detailed Proposal: Expansions, Lie Algebras, and Invariants

# Submitted? October 24, 2016?

Organizing committee and scientific committee

List names and contact information for the organizing committee. Indicate who is the contact organizer, and who will be responsible for writing a short activity report after the event.

If organizers are predominantly from CRM member institutions, it may be appropriate to additionally form a scientific committee consisting of experts in the subject area from other parts of the world.

* Anton Alekseev, Section of Mathematics, University of Geneva, [Anton.Alekseev@unige.ch](mailto:Anton.Alekseev@unige.ch).
* Dror Bar-Natan, Department of Mathematics, University of Toronto, [drorbn@math.toronto.edu](mailto:drorbn@math.toronto.edu), <http://www.math.toronto.edu/drorbn>, contact organizer and responsible for the activity report.
* Roland van der Veen, Mathematisch Instituut, Universiteit Leiden, [roland.mathematics@gmail.com](mailto:roland.mathematics@gmail.com), http://www.rolandvdv.nl/.

Executive summary

A one-paragraph overview of the proposed program, which clearly states the purpose and goals.

Scientific description

A description of the month-long program. There is no fixed length which is required. However, the description should convince the international scientific advisory committee (ISAC) of the high-scientific quality of the program. Please keep in mind the specific points mentioned in the letter, which ISAC viewed as particularly important.

Publications

If appropriate, indicate if any publications are planned or are possible in connection with the event.

We encourage you to consider publishing proceedings, or related work, in one of the CRM publication series. In light of the goals of the 50'th anniversary program, we particularly encourage works of a ``visionary'' or survey-type nature.

For more information on CRM publication possibilities, please see <http://www.crm.umontreal.ca/pub/pub_an.shtml>

Industrial connections

If appropriate, indicate any potential or planned connections with industry.

I plan to completely remove this section, including the header.

Participants

Indicate the expected number of funded and non-funded participants of the relevant categories (plenary speakers, invited speakers, graduate students, young researchers, local researchers, local students), for the various program activities. This section should generally address demographic diversity and thematic diversity among participants; other sections may also address diversity as appropriate.

Please include the names of key participants. It may also make sense to provide short bios for some of the key participants. If some potential participants have already indicated their interest/availability, this information should be included.

Local expertise

If appropriate, list the names of researchers at CRM member universities who may participate or who have students who may participate in the month-long program, and of CRM laboratories whose research areas substantially overlap with those of the program.

Timeline, relation with other activities

Provide a timeline of planned activities within the program. If appropriate, indicate the proposed or preferred dates of the program.

If appropriate, address any thematic or temporal overlap with other activities (at the CRM or elsewhere). Examples include: a training activity preceding a research activity; a conference in a related area which will likely increase event attendance; a program occurring elsewhere which may draw on the same pool of researchers or students.

Projected budget, funding sources

Include a tentative budget for the program. If you already have external funding to supplement CRM funds, or If you intend to apply for such funding from other sources, please indicate this here.

Depending on the nature of the activity, some or all of the following estimates may be useful. These are estimates; actual costs may vary depending on the time of year, the nature of the event, and the availability of accommodation. Many organizers choose to reimburse expenses up to a fixed amount, rather than covering all the expenses of each participant.

* $150/night for accommodation in a hotel near the CRM.
* $250/week for accommodation in U de M student residences (available during summer)
* $350/week for accommodation in UQAM student residences (available during summer)
* $45/day maximum per diem for meals.
* Cost of coffee breaks and receptions should be covered by event registration fees or from non-CRM sources whenever possible.
* The CRM cost for design and distribution of a poster for distribution to mathematics departments in Canada and abroad, is approximately $2500.