Licence to Publish **Proceedings Papers**

SPRINGER NATURE

(the 'Volume')

Springer Nature Switzerland AG (the 'Licensee') Licensee

Title of the Proceedings Volume/Edited Book or Conference Name:

Proceedings of the 37th International Conference on

Computer Aided Verification (CAV 2025)

Volume Editor(s) Name(s): Ruzica Piskac, Zvonimir Rakamaric

Proposed Title of the D-Hammer: Efficient Equational Reasoning for Labelled (the 'Contribution')

Contribution: **Dirac Notation**

Series: The Contribution may

be published in the following series

A Springer Nature Computer Science book series (CCIS,

LNAI, LNBI, LNBIP or LNCS)

Author(s) Full Name(s): Yingte Xu, Li Zhou and Gilles Barthe (the 'Author')

When Author is more than one person the expression "Author" as used in this Agreement will apply collectively unless

otherwise indicated.

Corresponding Author Name: Gilles Barthe

Instructions for Authors https://resource-cms.springernature.com/springer-(the 'Instructions for

> cms/rest/v1/content/19242230/data/ Authors')

Licence Applicable to the Contribution:

Creative Commons licence CC BY: This licence allows readers to copy, distribute and transmit the Contribution as long as it is attributed back to the author. Readers are permitted to alter, transform or build upon the Contribution, and to use the Contribution for commercial purposes. Please read the full licence for further details at - http://creativecommons.org/licenses/by/4.0/

Subject to editorial acceptance of the Contribution, it will be published under the Creative Commons licence shown above.

1 **Grant of Rights**

For good and valuable consideration, the Author hereby grants to the Licensee the perpetual, non-exclusive, irrevocable, world-wide, assignable, sublicensable and unlimited right to: publish, reproduce, copy, distribute, communicate, display publicly, sell, rent and/or otherwise make available the contribution identified above, including any supplementary information and graphic elements therein (e.g. illustrations, charts, moving images) (the 'Contribution') in any language, in any versions or editions in any and all forms and/or media of expression (including without limitation in connection with any and all end-user devices), whether now known or developed in the future. Without limitation, the above grant includes: (i) the right to edit, alter, adapt, adjust and prepare derivative works; (ii) all advertising and marketing rights including without limitation in relation to social media; (iii) rights for any training, educational and/or instructional purposes; (iv) the right to add and/or remove links or combinations with other media/works; and (v) the right to create, use and/or license and/or sublicense content data or metadata of any kind in relation to the Contribution (including abstracts and summaries) without restriction. The above rights are granted in relation to the Contribution as a whole or any part and with or

in relation to any other works.

- b) Without limiting the rights granted above, Licensee is granted the rights to use the Contribution for the purposes of analysis, testing, and development of publishing- and research-related workflows, systems, products, projects, and services; to confidentially share the Contribution with select third parties to do the same; and to retain and store the Contribution and any associated correspondence/files/forms to maintain the historical record, and to facilitate research integrity investigations. The grant of rights set forth in this clause (b) is irrevocable.
- c) If the Licensee elects not to publish the Contribution for any reason, all publishing rights under this Agreement as set forth in clause 1a above will revert to the Author.

2 Copyright

Ownership of copyright in the Contribution will be vested in the name of the Author. When reproducing the Contribution or extracts from it, the Author will acknowledge and reference first publication in the Volume.

3 Use of Contribution Versions

- a) For purposes of this Agreement: (i) references to the "Contribution" include all versions of the Contribution; (ii) "Submitted Manuscript" means the version of the Contribution as first submitted by the Author prior to peer review; (iii) "Accepted Manuscript" means the version of the Contribution accepted for publication, but prior to copy-editing and typesetting; and (iv) "Version of Record" means the version of the Contribution published by the Licensee, after copy-editing and typesetting. Rights to all versions of the Manuscript are granted on a non-exclusive basis.
- b) The Author may make the Submitted Manuscript available at any time and under any terms (including, but not limited to, under a CC BY licence), at the Author's discretion. Once the Contribution has been published, the Author will include an acknowledgement and provide a link to the Version of Record on the publisher's website: "This preprint has not undergone peer review (when applicable) or any post-submission improvements or corrections. The Version of Record of this contribution is published in [insert volume title], and is available online at https://doi.org/[insert DOI]".
- c) Immediately after acceptance the Author may deposit the Accepted Manuscript to any location, and under any terms (including, but not limited to, under a CC BY licence), provided it is not made publicly available until after publication. The Author will include an acknowledgement in the Accepted Manuscript, together with a link to the Version of Record on the publisher's website: "This version of the contribution has been accepted for publication, after peer review (when applicable) but is not the Version of Record and does not reflect post-acceptance improvements, or any corrections. The Version of Record is available online at: http://dx.doi.org/[insert DOI]".

 Any use of the Accepted Manuscript not expressly permitted under this subclause (c) is subject to the Licensee's prior consent.

4 Warranties & Representations

Author warrants and represents that:

a)

- i. the Author is the sole copyright owner or has been authorised by any additional copyright owner(s) to grant the rights defined in clause 1,
- ii. the Contribution does not infringe any intellectual property rights (including without limitation copyright, database rights or trade mark rights) or other third party rights and no licence from or payments to a third party are required to publish the Contribution.
- iii. the Contribution has not been previously published or licensed, nor has the Author committed to licensing any version of the Contribution under a licence inconsistent with the terms of this Agreement,
- iv. if the Contribution contains materials from other sources (e.g. illustrations, tables, text quotations), Author has obtained written permissions to the extent necessary from the copyright holder(s), to license to the Licensee the same rights as set out in clause 1 and has cited any such materials correctly;
- b) all of the facts contained in the Contribution are according to the current body of research true and accurate;
- nothing in the Contribution is obscene, defamatory, violates any right of privacy or publicity, infringes any other human, personal or other rights of any person or entity or is otherwise unlawful and that informed consent to publish has been obtained for any research participants;
- d) nothing in the Contribution infringes any duty of confidentiality owed to any third party or violates any contract, express or implied, of the Author;
- all institutional, governmental, and/or other approvals which may be required in connection with the research reflected in the Contribution have been obtained and continue in effect;
- f) all statements and declarations made by the Author in connection with the Contribution are true and correct;
- the signatory who has signed this Agreement has full right, power and authority to enter into this Agreement on behalf of all of the Authors; and
- h) the Author complies in full with: i. all instructions and policies in the Instructions for Authors, ii. the Licensee's ethics rules (available at https://www.springernature.com/gp/authors/book-authors-code-of-conduct), as may be updated by the Licensee at any time in its sole discretion.

5 Cooperation

a) The Author will cooperate fully with the Licensee in relation to any legal action that might

arise from the publication of the Contribution, and the Author will give the Licensee access at reasonable times to any relevant accounts, documents and records within the power or control of the Author. The Author agrees that any Licensee affiliate through which the Licensee exercises any rights or performs any obligations under this Agreement is intended to have the benefit of and will have the right to enforce the terms of this Agreement.

b) Author authorises the Licensee to take such steps as it considers necessary at its own expense in the Author's name(s) and on their behalf if the Licensee believes that a third party is infringing or is likely to infringe copyright in the Contribution including but not limited to initiating legal proceedings.

6 Author List

Changes of authorship, including, but not limited to, changes in the corresponding author or the sequence of authors, are not permitted after acceptance of a manuscript.

7 Post Publication Actions

The Author agrees that the Licensee may remove or retract the Contribution or publish a correction or other notice in relation to the Contribution if the Licensee determines that such actions are appropriate from an editorial, research integrity, or legal perspective.

8 Controlling Terms

The terms of this Agreement will supersede any other terms that the Author or any third party may assert apply to any version of the Contribution.

9 Governing Law

This Agreement shall be governed by, and shall be construed in accordance with, the laws of Switzerland. The courts of Zug, Switzerland shall have the exclusive jurisdiction.

Signed for and on behalf of the Author	Print Name:		Date:
Offingle Her	Yingte Xu		13/05/2025
Address:	Universitätsstraße 140, 44799 Bochum		
Email:	lucianoxu@foxmail.com		

Springer Nature Switzerland AG, Gewerbestrasse 11, 6330 Cham, Switzerland ER_Book_ProceedingsPaper_LTP_OA_v.1.0 (10_2021)