



Promotionsausschuss

Begleitschreiben zu Antrag einer Kumulativen Doktorarbeit von Vasily Sotnikov.

In meiner Rolle als Erstbetreuer von Vasily Sotnikov unterstütze ich seinen Antrag zur Einreichung seiner wissenschaftlicher Arbeiten als kumulative Dissertation. Vasily hat zu herausragenden wissenschaftlichen Publikationen in sehr signifikanter und oft federführender Weise beigetragen.

Im Rahmen seiner Promotion konnten wir die folgenden Artikel gemeinsam veröffentlichen:

1. NLO QCD predictions for Wbb production in association with up to three light jets at the LHC [Phys. Rev. D **97**, no. 3, 036018 (2018)]
2. Planar Two-Loop Five-Parton Amplitudes from Numerical Unitarity [JHEP **1811**, 116 (2018)]
3. Analytic Form of the Planar Two-Loop Five-Parton Scattering Amplitudes in QCD [JHEP **1905**, 084 (2019)]

Weitere Publikationen basierend auf seiner wissenschaftlichen Arbeit sind in den kommenden Monaten geplant.

Ich bestätige, dass Vasily klar ein Hauptautor der Publikationen ist, wie in seinem beigelegten Schreiben "Proposal for Cumulative Thesis" korrekt und detailliert ausgeführt.

Weiters übermittle als Beilage Schreiben unserer Co-Autoren Samuel Abreu, Ben Page, Jerry Dormans sowie seines Zweitbetreuers Prof. Fernando Febres Cordero. Die Schreiben bestätigen jeweils Vasily's zentralen Beitrag zu den genannten Publikationen.

Mit freundlichen Grüßen,

Prof. Dr. Harald Ita

Albert-Ludwigs-Universität
Freiburg

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Freiburg, Tuesday, 18 June 2019

cumulative thesis / Sotnikov

Fernando Febres Cordero <ffebres@physik.uni-freiburg.de>
To: Harald Ita <harald.ita@physik.uni-freiburg.de>

Thu, Jun 20, 2019 at 12:55 PM

Dear Harald,

could you please forward the below statement to the Doctoral examination committee.

In my role as the 2nd supervisor of Vasily Sotnikov I support him submitting the PhD thesis in the cumulative format. I confirm that he did excellent work during his PhD and contributed in very significant way to our joint publications. We could publish the following papers,

- 1) NLO QCD predictions for Wbb production in association with up to three light jets at the LHC [Phys. Rev. D **97**, no. 3, 036018 (2018)]
- 2) Planar Two-Loop Five-Parton Amplitudes from Numerical Unitarity [JHEP **1811**, 116 (2018)]
- 3) Analytic Form of the Planar Two-Loop Five-Parton Scattering Amplitudes in QCD [JHEP **1905**, 084 (2019)]

Additional publications may appear in the coming months.

I acknowledge that Vasily's contributions to the papers were very significant and he clearly qualifies as a main author.

Furthermore, I confirm the presentation of Vasily's contributions in the attached statement "Proposal for Cumulative Thesis" submitted by Vasily.

Best wishes,

Fernando Febres Cordero

Vasiliy's papers

2 messages

Samuel Abreu <abreusamuel@gmail.com>

Wed, Jun 19, 2019 at 8:38 PM

To: Harald Ita <harald.ita@physik.uni-freiburg.de>

Dear Harald,

Vasiliy Sotnikov was a coauthor in the papers:

- 1) Planar Two-Loop Five-Parton Amplitudes from Numerical Unitarity [JHEP **1811**, 116 (2018)]
- 2) Analytic Form of the Planar Two-Loop Five-Parton Scattering Amplitudes in QCD [JHEP **1905**, 084 (2019)]

In both cases he made a significant contribution to the work presented and was one of the main authors of the papers.

Best regards,
Samuel

H Ita <harald.ita@physik.uni-freiburg.de>

Thu, Jun 20, 2019 at 1:59 PM

To: Samuel Abreu <abreusamuel@gmail.com>

Thanks!

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Authorship of the paper: [JHEP 1905, 084 (2019)]

2 messages

Jerry <jerry.dormans@physik.uni-freiburg.de>

Thu, Jun 20, 2019 at 11:21 AM

To: H Ita <harald.ita@physik.uni-freiburg.de>

Cc: Vasily Sotnikov <vasily.sotnikov@physik.uni-freiburg.de>

Dear Harald,

I am sending this email to confirm that Vasily Sotnikov has been a co-author on the paper

Analytic Form of the Planar Two-Loop Five-Parton Scattering Amplitudes in QCD [JHEP **1905**, 084 (2019)].

Furthermore, I acknowledge that he has contributed a significant amount of the work necessary to compute the results presented in the above mentioned paper and as such is a main author of the publication.

Best regards,
Jerry Dormans

H Ita <harald.ita@physik.uni-freiburg.de>

Thu, Jun 20, 2019 at 1:58 PM

To: Jerry <jerry.dormans@physik.uni-freiburg.de>

thanks. --H.

[Quoted text hidden]

Co-Author Attestation.

2 messages

Ben Page <ben.page@physik.uni-freiburg.de>
To: H Ita <harald.ita@physik.uni-freiburg.de>

Thu, Jun 20, 2019 at 2:07 PM

Dear Professor Ita,

I write to confirm the co-authorship of Vasily Sotnikov in the papers, "Planar Two-Loop Five-Parton Amplitudes from Numerical Unitarity" published in [JHEP **1811**, 116 (2018)] and "Analytic Form of the Planar Two-Loop Five-Parton Scattering Amplitudes in QCD" published in [JHEP **1905**, 084 (2019)]. Furthermore, I affirm that the contribution made by Vasily was significant and that he is a main author of these two papers.

Best regards,

Ben Page

H Ita <harald.ita@physik.uni-freiburg.de>
To: Ben Page <ben.page@physik.uni-freiburg.de>

Thu, Jun 20, 2019 at 2:17 PM

Thanks!

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