

# ANDREY CHETVERIKOV

Ph.D., Postdoctoral Fellow  
Center for Cognitive Neuroimaging  
Donders Institute for Brain, Cognition and Behavior  
Radboud University, Nijmegen, The Netherlands

E-mail: [a.chetverikov@donders.ru.nl](mailto:a.chetverikov@donders.ru.nl)

Phone: +31 6 83777123

Web: <http://andreychetverikov.org>

Google Scholar: <https://scholar.google.com/citations?user=qZ1fAMcAAAAJ>

Github: <https://github.com/achetverikov>

Open data and scripts: <https://osf.io/cg7wi/>

---

## RESEARCH SUMMARY

The real-world visual environment is very variable. Imagine that you go to a grocery store and see a basket with two varieties of apples. The difference between them is immediately clear, even though in each variety no two apples are identical. How does the brain decide which constellations of colors are important to describe two visual ensembles, such as two piles of apples? What algorithms are used to encode the probabilities of simple visual features, like colors, within an ensemble? How are these constellations of features represented in the cortex, and how do we acquire this knowledge over time? I use a combination of computational modelling, neuroscience (fMRI), and behavioral research to answer this question, focusing on visual perception.

---

## EDUCATION

- |             |   |
|-------------|---|
| 2011 – 2015 | Ph.D., Department of Psychology, St. Petersburg State University, Russia. Thesis: <i>“Affect as a feedback in cognitive tasks”</i> . Advisor: Prof., Dr. V. Allakhverdov.   |
| 2009 – 2011 | Master of Psychology (with distinction) at the Department of Psychology, St. Petersburg State University. Specialization: Cognitive Psychology, Psychology of Emotions. Thesis: <i>“Affective evaluation in perceptual comparison, identification, and recognition tasks”</i> . Advisor: Prof., Dr. V. Karpinskaya. |
| 2005 – 2009 | Bachelor of Psychology (with distinction) at the Department of Psychology, St. Petersburg State University. Thesis: <i>“Perception of illusory, ambiguous, and subliminal objects by people in different emotional states”</i> . Advisor: V. Volokhonsky.   |

---

## ACADEMIC POSITIONS

- |                |   |
|----------------|---|
| 2017 – present | Postdoc at the Donders Institute for Brain, Cognition and Behavior, Center for Cognitive Neuroimaging. P.I.: Janneke Jehee. |
|----------------|---|

2015 – 2017	Postdoc at Department of Psychology, University of Iceland. P.I.: Árni Kristjánsson.
2010 – 2015	Junior Researcher, Cognitive Psychology Laboratory at the Department of Psychology, St. Petersburg State University.
2012 – 2012	Teaching assistant at the General Psychology Chair of the Department of Psychology, St. Petersburg State University.
2009	Research Assistant at “Research Center n.a. B.G. Ananiev” at the Department of Psychology, St. Petersburg State University.

---

## GRANTS

2017 – 2019	<i>Radboud Excellence Initiative</i> fellowship.  This postdoctoral fellowship is awarded by Radboud University (approx. €175.000). Per selection round, about 20 fellows are being nominated (only about 200 faculty members at the university qualify to nominate) and around 6 requests for fellowships are eventually honored, provided that “the candidate has quality, above-average performances and excellent recommendations”.
2017 – 2019	<i>Internal representations of perceptual ensembles (lead P.I.)</i>  Supported by the Icelandic Research Fund (45.000.000 ISK, approx. 400.000 USD; co-P.I.: Á. Kristjánsson, G. Campana; success rate is 11%).
2015 – 2017	Travel grants from the University of Iceland (four grants in total).
2015	Short-listed for Marie Curie PISCOPIA fellowship to work at the University of Padova (16 out of 99 applications were selected). Withdrawn the application as I had already accepted the position at the University of Iceland by the time the results were announced.
2012 – 2017	Various junior-level grants from the Russian Foundation for Basic Research (RFBR; success rate about 30%), the Russian Foundation for Humanities (RFH; success rate about 50%), and St. Petersburg University (SPSU, success rate about 30%). Projects: “ <i>Attentional selection in the situation of cognitive conflict: dissociation between markers of error and error awareness</i> ” (P.I., RFBR, 3 years, approx. 37.500 USD), “ <i>Cognitive models of features' distribution in visual search</i> ” (P.I., RFH, 2 years, approx. 15.000 USD), “ <i>Affective evaluation as implicit memory about previous choices</i> ” (personal grant, RFH, 2 years, approx. 11.612 USD), “ <i>Heuristics in the ‘tip-of-the-tongue’ phenomenon</i> ” (P.I., SPSU, 1 year, approx. 3200 US) .
2010 – 2014	Travel grants from St. Petersburg State University (6 grants in total) and the Russian Association for Cognitive Studies (2 grants).

---

## AWARDS

2020	Vision Science Society travel award. Granted by the society to support outstanding students and postdocs participating in Vision Science Society annual meeting.
2015	“Junior researcher of the year” award at the Department of Psychology, St. Petersburg State University (one award is given each year).
2013 – 2014	Special scholarship from the rector of St. Petersburg State University for outstanding Ph.D. students. This scholarship was created in 2013. In total, 2 to 6 scholarships are awarded each year university-wide. I was the only Ph.D. student from the psychology department who was honored with it.

2012, 2014	Fee waiver for the summer school “Perceptual organization: Interdisciplinary approaches and research skills” (Leuven, Belgium, 2014) and a stipend from the NCCR Affective Sciences to cover participation in an International Summer School on Affective Sciences (Bogis-Bossey, Switzerland, 2012).
2014	ECVP (European Conference on Visual Perception) Ph.D. student award for “Outstanding young vision scientists”. Granted by ECVP organizers to cover the traveling costs of 10 students.
2009 – 2014	Various student awards (2009, 2010) and Ph.D. student (2013, 2014) awards from the government of St. Petersburg. This is the annual competition for BSc and MSc theses projects (success rate is about 15%, approx. 645 USD) and for Ph.D. students short-term projects (success rate is about 13%, approx. 1600 USD).
2010	Honorary medal “For the best scientific paper in Psychology” (for students) from the Ministry of Education and Science of the Russian Federation. In total, 498 papers competed and 6 medals were awarded (top 1% of participants).
2009	1st prize and an honorary medal for the best degree work at the Department of Psychology, St. Petersburg State University. The prize is awarded for the best thesis among more than 500 graduates (BSc and MSc).

---

## TEACHING EXPERIENCE

### COURSES TAUGHT

2016-2017	“ <i>Sensation &amp; Perception</i> ”, University of Iceland (undergraduate level, substitute lecturer)
2013-2015	“ <i>PsychoPy and Python for cognitive experiments</i> ”, St. Petersburg State University (developed and read the course; undergraduate level)
2014	“ <i>PsychoPy survival course</i> ” (developed and read the 3-day intensive course for undergraduate and graduate students, St. Petersburg)
2013-2015	“ <i>Statistical modelling in R</i> ”, Bioinformatics Institute, St. Petersburg (developed and read the course; graduate level).
2012	“ <i>Experimental Psychology</i> ”, “ <i>Perception</i> ”, “ <i>Introductory Statistics</i> ”, St. Petersburg State University (taught seminars; undergraduate level)

### SUPERVISION

2017-now	Postdocs, Sabrina Hansmann-Roth and Omer Daglar Tanrikulu, project title “Internal representations of perceptual ensembles”, University of Iceland (co-supervisor)
2017-now	Ph.D., Mohsen Raifei, project title: “Internal representations of perceptual ensembles”, University of Iceland (co-advisor)
2017	BSc thesis, Inga Rún Sæmundsdóttir, project title: “When Do People Seek Novelty? Preferences Towards Novelty Depending On The Surrounding Context”, University of Iceland (co-advisor)
2016	Supervised MSc student Olga Shurygina during her internship at the University of Iceland (the results were published in <i>Journal of Experimental Psychology: Human Perception and Performance</i> )
2016	BSc thesis, Ásdís Eva Ólafsdóttir, project title: “Effect of Attentional Bias in Discrimination of Negative, Positive and Neutral Facial Expressions in Foraging Tasks”, University of Iceland (co-advisor)
2014 - 2015	MSc thesis, Vasili Marshev, project title: “Spatial characteristics of visual attention during change blindness”, St. Petersburg State University (co-advisor)

2012-2014 Supervised BSc students Anastasia Fedorova, Olga Shmonina, and Vasiliy Klaiman during their work at the Cognitive Psychology laboratory, St. Petersburg State University (the results of this project were published as two papers).

#### VARIOUS GUEST LECTURES

“A practice with Bayesian Regression Modelling” (2020, Donders Institute), “Power analyses in R” (TCTS 2020 graduate school, St. Petersburg), “Characterizing the trial-by-trial imprecision in cortical stimulus representations using fMRI” (2019, Donders Institute), “Academia 101” (TCTS 2017 graduate school, St. Petersburg), “How to make a good poster” (2015, St. Petersburg State University), “How the brain predicts” (2014, Cognitive Science Summer School, Moscow; repeated at 2015, Winter Psychological School, St. Petersburg), “How to visualize your data” (2014, St. Petersburg State University), “10 rules for surviving in science” (2014, Winter Psychological School, St. Petersburg).

---

#### INVITED TALKS

04.2019 University of Leuven, Leuven, Belgium.  
Symposium: “Perspectives on Perceptual Learning in Humans and Monkeys”

03.2018 Padova University, Padova, Italy

12.2017 University of Ghent, Ghent, Belgium

12.2017 University of Leuven, Leuven, Belgium

06.2015 Russian Academy of National Economy and Public Administration, Moscow, Russia

11.2013 Moscow Seminar on Cognitive Sciences, Moscow State University, Moscow, Russia

11.2013 Higher School of Economics, Moscow, Russia

04.2013 University of Iceland, Reykjavik, Iceland

11.2011 Higher School of Economics, Moscow, Russia

---

#### COMMUNITY & PUBLIC SERVICE

- Co-organizer and a board member of “Think Cognitive Think Science” fund (<http://thinkcognitive.org>) since 2013—non-governmental support fund for Russian students studying cognitive sciences. Provides annual small grants, organizes educational and networking events.
  - Organized public events, such as a “Time of Illusions” exhibition during the Night of Museums in St. Petersburg.
  - Invited speakers and organized regular open lectures at the Faculty of Psychology, St. Petersburg State University.
- 

#### ORGANIZATION OF ACADEMIC EVENTS

2015, 2017, 2020 *Think Cognitive Think Science GRADSCHOOL* (3-day graduate school, St. Petersburg, Russia)

2018 *Ensemble perception is more than averages* (symposium at ECVF 2018, Trieste, Italy)

2014 *3rd International conference on implicit learning “Implicit learning: Interactions between consciousness & the unconscious”* (3-day conference, St. Petersburg State University, Russia)

2013 *The great illusion of consciousness 2013* (2-day symposium, Higher School of Economics, Russia)

2013 *History effects and functions of attention: Origins of hypotheses* (4-day symposium, St. Petersburg State University, Russia)

- 2013 *From vase to faces: interpreting ambiguous information* (2-day symposium, St. Petersburg State University, Russia)
- 2012 *Automatism of insight* (2-day symposium, St. Petersburg State University, Russia)
- 

#### AD-HOC REVIEWER

- Journals: Scientific Reports, Neuroscience, NeuroImage, Cognition, Emotion, "Attention, Perception, & Psychophysics", Cognition & Emotion, i-Perception, Art & Perception, "Journal of Experimental Psychology: Human Perception and Performance, Cognitive Psychology, Behavioral Research Methods, Journal of Cognitive Psychology, Scandinavian Journal of Psychology, Russian Journal for Cognitive Science, Bulletin of Saint Petersburg University (Russia), Experimental Psychology (Russia), "Psychology. Journal of the Higher School of Economics" (Russia), Psychological Studies (Russia).
  - Reviewer for MSc and undergraduate theses at Higher School of Economics (Moscow, Russia), Saint Petersburg State University (St. Petersburg, Russia).
- 

#### PAPERS

Particularly important papers are highlighted in bold. Total number of citations per Google Scholar as of June 2020: 472, h-Index: 11. Data and code for the recent papers are available at my OSF page: <https://osf.io/cg7wi/>

1. Hansmann-Roth, S., Kristjánsson, Á., Whitney, D., & Chetverikov, A. (under review). Limits of perception and richness of behaviour: Dissociating implicit and explicit ensemble representations. Preprint: <https://doi.org/10.31234/osf.io/3y4pz>
2. Tanrikulu, Ö. D., Chetverikov, A. & Kristjánsson, Á. (under review). Is there empirical support for probabilistic mental representations? A case within visual perception. Preprint: <https://doi.org/10.31234/osf.io/4ap3f>
3. Tanrikulu, Ö. D., Chetverikov, A. & Kristjánsson, Á. (under review). Testing temporal integration of feature probability distributions using role-reversal effects in visual search. Preprint: <https://doi.org/10.31234/osf.io/cynhw>
4. Tanrikulu, Ö. D., Chetverikov, A. & Kristjánsson, Á. (in print) Encoding perceptual ensembles during visual search in peripheral vision. *Journal of Vision*.
5. MacInnes, J., Jóhannesson, Ó. I., Chetverikov, A., & Kristjánsson, A. (2020). No advantage for separating overt and covert attention in visual search. *Vision*, 4(2), 28. <https://doi.org/10.3390/vision4020028>
6. Rafiei, M., Hansmann-Roth, S., Whitney, D., Kristjánsson, Á., & Chetverikov, A. (2020). Optimizing perception: Attended and ignored stimuli create opposing perceptual biases. *Attention, Perception, and Psychophysics*. <https://doi.org/10.3758/s13414-020-02030-1>
7. Rahnev, D., ..., Chetverikov, A., ... Zylberberg, A. (2020). The confidence database. *Nature Human Behaviour*, 4, 317–325. <https://doi.org/10.1038/s41562-019-0813-1> Preprint: <https://doi.org/10.31234/osf.io/h8tju>
8. **Chetverikov, A., Campana, G., & Kristjánsson, Á. (2020). Probabilistic rejection templates in visual working memory. *Cognition*, 196, 104075. <https://doi.org/10.1016/j.cognition.2019.104075>. Preprint: <https://doi.org/10.31234/osf.io/vrbgh>**
9. Kristjánsson, T., Thornton, I. M., Chetverikov, A., & Kristjánsson, Á. (2020). Dynamics of visual attention revealed in foraging tasks. *Cognition*, 194, 104032. <https://doi.org/10.1016/j.cognition.2019.104032>
10. Hansmann-Roth, S., Chetverikov, A., & Kristjánsson, Á. (2019). Representing color and orientation ensembles: Can observers learn multiple feature distributions? *Journal of Vision*, 19(9), 1-17. <https://doi.org/10.1167/19.9.2>
11. Chetverikov, A., Hansmann-Roth, S., Tanrikulu, Ö. D., & Kristjánsson, Á. (2019). Feature Distribution Learning (FDL): A New Method for Studying Visual Ensembles Perception with Priming of Attention Shifts. In *Neuromethods* (pp. 1–21). Springer. [https://doi.org/10.1007/978-1-4939-9820-0\\_20](https://doi.org/10.1007/978-1-4939-9820-0_20)

12. Shurygina, O., Kristjánsson, Á., Tudge, L., & Chetverikov, A. (2019). Expectations and perceptual priming in a visual search task: Evidence from eye movements and behavior. *Journal of Experimental Psychology: Human Perception and Performance*, 45(4), 489–499. <https://doi.org/10.1037/xhp0000618>.
13. Geurts, L. S., Chetverikov, A., van Bergen, R. S., Zhou, Y. J., Bertana, A., & Jehee, J. F. M. (2018). Optimality is critical when it comes to testing computation-level hypotheses. *Behavioral and Brain Sciences*, 41, e231. <https://doi.org/10.1017/S0140525X18001450>
14. Kuvaldina, M., Chetverikov, A., Odainic, A. S., Filippova, M. G., & Andriyanova, N. V. (2019). Implicit learning from one's mistakes. In A. Cleeremans & V. M. Allakhverdov (Eds.), *Implicit Learning: 50 Years On* (pp. 108–132). Psychology Press. <https://doi.org/10.4324/9781315628905>
15. Ivanchei, I., Begler, A., Iamschinina, P., Filippova, M., Kuvaldina, M., & Chetverikov, A. (2019). A different kind of pain: affective valence of errors and incongruence. *Cognition and Emotion*, 33(5), 1051–1058. <https://doi.org/10.1080/02699931.2018.1520077>
16. Chetverikov, A., Kuvaldina, M., MacInnes, W. J., Jóhannesson, Ó. I., & Kristjánsson, Á. (2018). Implicit processing during change blindness revealed with mouse-contingent and gaze-contingent displays. *Attention, Perception, and Psychophysics*. <https://doi.org/10.3758/s13414-017-1468-5>
17. Chetverikov, A., Campana, G., & Kristjánsson, Á. (2017). Learning features in a complex and changing environment: A distribution-based framework for visual attention and vision in general. *Progress in Brain Research*, 1–24. <https://doi.org/10.1016/bs.pbr.2017.07.001>
18. Chetverikov, A., Campana, G., & Kristjánsson, Á. (2017). Representing Color Ensembles. *Psychological Science*, 28(10), 1–8. <https://doi.org/10.1177/0956797617713787>
19. Chetverikov, A., Campana, G., & Kristjánsson, Á. (2017). Rapid learning of visual ensembles. *Journal of Vision*, 17(2), 1–15. <https://doi.org/10.1167/17.2.21>
20. Chetverikov, A., Campana, G., & Kristjánsson, Á. (2017). Set size manipulations reveal the boundary conditions of distractor distribution learning. *Vision Research*, 140(November), 144–156. <https://doi.org/10.1016/j.visres.2017.08.003>
21. Chetverikov, A., Iamschinina, P., Begler, A., Ivanchei, I., Filippova, M., & Kuvaldina, M. (2017). Blame everyone: Error-related devaluation in Eriksen flanker task. *Acta Psychologica*, 180 (September 2017), 155–159. <https://doi.org/10.1016/j.actpsy.2017.09.008>
22. Kristjánsson, Á., Chetverikov, A., & Brinkhuis, M. (2017). How functional are functional viewing fields? *Behavioral and Brain Sciences*, 40, e143. <https://doi.org/10.1017/S0140525X16000133>
23. Chetverikov, A., Campana, G., & Kristjánsson, Á. (2016). Building ensemble representations: How the shape of preceding distractor distributions affects visual search. *Cognition*, 153, 196–210. <http://doi.org/10.1016/j.cognition.2016.04.018>
24. Chetverikov, A., & Ivanchei, I. (2016). Seeing “the Dress” in the Right Light: Perceived Colors and Inferred Light Sources. *Perception*, 45(8), 910–930. <http://doi.org/10.1177/0301006616643664>
25. Chetverikov, A., & Kristjánsson, Á. (2016). On the joys of perceiving: Affect as feedback for perceptual predictions. *Acta Psychologica*, 169, 1–10. <http://doi.org/10.1016/j.actpsy.2016.05.005>
26. Jóhannesson, Ó. I., Thornton, I. M., Smith, I. J., Chetverikov, A., & Kristjánsson, Á. (2016). Visual Foraging with Fingers and Eye Gaze. *i-Perception*, 7(2). <http://doi.org/10.1177/2041669516637279>
27. Chetverikov, A., & Upravitelev, P. (2016). Online versus offline: The Web as a medium for response time data collection. *Behavior Research Methods*, 48(3), 1086–1099. <http://doi.org/10.3758/s13428-015-0632-x>
28. Marshev, V., Chetverikov, A., & Kuvaldina, M. (2016). Timing makes a difference: A study of change blindness with secondary task interference. *Cognition, Creier, Comportament/Cognition, Brain, Behavior*, 20, 373–385.
29. Chetverikov, A., Jóhannesson, Ó. I., & Kristjánsson, Á. (2015). Blaming the victims of your own mistakes: How visual search accuracy influences evaluation of stimuli. *Cognition & Emotion*, 26(6), 1091–1106. <http://doi.org/10.1080/02699931.2014.968097>
30. Chetverikov, A., & Kristjánsson, Á. (2015). History effects in visual search for monsters: Search times, choice biases, and liking. *Attention, Perception, & Psychophysics*, 77(2), 402–412. <http://doi.org/10.3758/s13414-014-0782-4>
31. Chetverikov, A., & Filippova, M. (2014). How to tell a wife from a hat: Affective feedback in perceptual categorization. *Acta Psychologica*, 151, 206–213. <http://doi.org/10.1016/j.actpsy.2014.06.012>

32. Chetverikov, A. (2014). Warmth of familiarity and chill of error: Affective consequences of recognition decisions. *Cognition & Emotion*, 28(3), 385–415. <http://doi.org/10.1080/02699931.2013.833085>
- 

#### PAPERS IN RUSSIAN

All titles are translated to English.

1. Chetverikov, A., & Kuvaldina, M. (2016). Perception of emotional information in inattentive blindness. *Bulletin of Yaroslavl State University*, 2(36), 100-104.
2. Chetverikov, A. (2015). Linear Mixed Effects Regression in Cognitive Studies. *The Russian Journal of Cognitive Science*, 2(1), 41–51 (abstract in English on p. 50).
3. Klayman, V., Fedorova, A., Shmonina, O., & Chetverikov, A. (2014). Implicit error detection on the tip-of-the tongue. *Bulletin of Yaroslavl State University*, 3, 69-75 (abstract in English on p. 69).
4. Chetverikov, A. (2014) Influence of visual search accuracy on affective evaluation of paintings. *Experimental Psychology (Russia)*, 7(2), 37-48 (abstract in English on p. 46).
5. Shmonina, O., Klaiman, V., Fedorova, A., & Chetverikov, A. (2014). Memory access in the tip-of-the-tongue state. *The Russian Journal of Cognitive Science*, 1(3), 18-30 (abstract in English on p. 29).
6. Chetverikov, A., Filippova, M., & Chernov, R (2014). How interpretation and recognition of object influences its affective evaluation: duck-squirrel perceived as a squirrel is not that different from a usual squirrel. *Psychology. Journal of the Higher School of Economics*, 11(1), 66–85 (abstract in English on p. 83).
7. Chetverikov, A., & Odainic, A. (2014) The models of subjective evaluation of performance in cognitive tasks: Part 2. Inferential theories. *Bulletin of Saint Petersburg University. Series 12: Psychology, Sociology, Paedagogics*, (1), 117–125 (abstract in English on pp. 117-118).
8. Chetverikov, A., & Lyahoveckiy, V. (2014) Asymmetry in mental representations with right or left hand repetition of a movement sequence. *Experimental Psychology (Russia)*, (1), 18–27 (abstract in English <http://psyjournals.ru/en/exp/2014/n1/69660.shtml>).
9. Chetverikov, A. (2013). Functions of emotions. In V. Spiridonov (ed.), *Cognitive psychology: phenomena and problems and excerpts* (pp. 188-199). Moscow: URSS.
10. Chetverikov, A., & Odainic, A. (2013) Models of subjective evaluation of performance in cognitive tasks: Part 1. Theories of additional evaluation and partial access theories. *Bulletin of Saint Petersburg University*, (3), 55–61 (abstract in English on p. 74).
11. Chetverikov, A. (2012). Trust towards pleasant and pleasantness of fluently processed. *Bulletin of Saint Petersburg University*, (1), 129-133 (abstract in English on p. 272).
12. Chetverikov, A. (2011). What are we conscious about while stepping on the same rake: The affective evaluation of “to-be-repeated” answers. *Experimental Psychology (Russia)*, 4(2), 36–47 (abstract in English <http://psyjournals.ru/en/exp/2011/n2/42145.shtml>).
13. Chetverikov, A. (2010). Perception of illusory, ambiguous and subliminal objects by people in different emotional states. In *Collection of papers of Faculty of Psychology graduates in 2009* (pp. 322–328). St. Petersburg: Publishing House of St. Petersburg University.
14. Karpinskaja V., & Chetverikov, A. (2009). The influence of autostereograms on the speed of a lexical decision. In A. Agafonov & V. Shpuntova (Eds.), *Psychological studies: collection of research papers* (7th ed., pp. 91–97). Samara: Univers-group.

Note: this list does not include all publications in Russian, please contact me if you require the full list.

---

#### CONFERENCE PRESENTATIONS

- 08.2019 poster “Decoding the imprecision of motion perception from activity in human visual cortex” at ECVF 2019, Leuven, Belgium.







Dr. Árni Kristjánsson Professor of Psychology, Laboratory for Visual Perception and Visuomotor Control, Faculty of Psychology, School of Health Sciences, University of Iceland, Iceland.

E-mail: [ak@hi.is](mailto:ak@hi.is)

Prof. Kristjánsson was my postdoc advisor at the University of Iceland.

Dr. Gianluca Campana Professor, Department of General Psychology, University of Padova, Italy.

E-mail: [gianluca.campana@unipd.it](mailto:gianluca.campana@unipd.it)

Prof. Campana is one of my collaborators.

June 27, 2020