

# Stanford

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## Ivan Nikolay Zheludev

Ph.D. Student in Biochemistry, admitted Autumn 2018

### Publications

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#### PUBLICATIONS

- **SPLASH: A statistical, reference-free genomic algorithm unifies biological discovery.** *Cell*  
Chaung, K., Baharav, T. Z., Henderson, G., Zheludev, I. N., Wang, P. L., Salzman, J.  
2023; 186 (25): 5440-5456.e26
- **Tertiary folds of the SL5 RNA from the 5' proximal region of SARS-CoV-2 and related coronaviruses.** *bioRxiv : the preprint server for biology*  
Kretsch, R. C., Xu, L., Zheludev, I. N., Zhou, X., Huang, R., Nye, G., Li, S., Zhang, K., Chiu, W., Das, R.  
2023
- **RNA target highlights in CASP15: Evaluation of predicted models by structure providers.** *Proteins*  
Kretsch, R. C., Andersen, E. S., Bujnicki, J. M., Chiu, W., Das, R., Luo, B., Masquida, B., McRae, E. K., Schroeder, G. M., Su, Z., Wedekind, J. E., Xu, L., Zhang, et al  
2023
- **Hybrids of RNA viruses and viroid-like elements replicate in fungi.** *Nature communications*  
Forgia, M., Navarro, B., Daghino, S., Cervera, A., Gisel, A., Perotto, S., Aghayeva, D. N., Akinyuwa, M. F., Gobbi, E., Zheludev, I. N., Edgar, R. C., Chikhi, R., Turina, et al  
2023; 14 (1): 2591
- **Restriction Endonuclease-Based Modification-Dependent Enrichment (REMoDE) of DNA for Metagenomic Sequencing.** *Applied and environmental microbiology*  
Enam, S. U., Cherry, J. L., Leonard, S. R., Zheludev, I. N., Lipman, D. J., Fire, A. Z.  
2022: e0167022
- **A statistical, reference-free algorithm subsumes myriad problems in genome science and enables novel discovery.** *bioRxiv : the preprint server for biology*  
Chaung, K., Baharav, T., Zheludev, I., Salzman, J.  
2022
- **Cryo-EM and antisense targeting of the 28-kDa frameshift stimulation element from the SARS-CoV-2 RNA genome.** *Nature structural & molecular biology*  
Zhang, K., Zheludev, I. N., Hagey, R. J., Haslecker, R., Hou, Y. J., Kretsch, R., Pintilie, G. D., Rangan, R., Kladwang, W., Li, S., Wu, M. T., Pham, E. A., Bernardin-Souibgui, et al  
2021
- **De novo 3D models of SARS-CoV-2 RNA elements from consensus experimental secondary structures.** *Nucleic acids research*  
Rangan, R., Watkins, A. M., Chacon, J., Kretsch, R., Kladwang, W., Zheludev, I. N., Townley, J., Rynge, M., Thain, G., Das, R.  
2021
- **RNA genome conservation and secondary structure in SARS-CoV-2 and SARS-related viruses: a first look.** *RNA (New York, N.Y.)*  
Rangan, R., Zheludev, I. N., Das, R.  
2020
- **Accelerated cryo-EM-guided determination of three-dimensional RNA-only structures.** *Nature methods*  
Kappel, K. n., Zhang, K. n., Su, Z. n., Watkins, A. M., Kladwang, W. n., Li, S. n., Pintilie, G. n., Topkar, V. V., Rangan, R. n., Zheludev, I. N., Yesselman, J. D., Chiu, W. n., Das, et al  
2020; 17 (7): 699–707
- **RNA genome conservation and secondary structure in SARS-CoV-2 and SARS-related viruses.** *bioRxiv : the preprint server for biology*

