

FASTSUM

- **Aim:**

- Study finite T with anisotropic lattices ($\xi = 3.5$)

- **Currently:**

- Gen2 ($m_\pi = 384$) and Gen2L ($m_\pi = 236$)
- Gauge: Symanzik-improved, tree-level tadpole
- Fermion: $N_f = 2 + 1$ Wilson-Clover (stout, tree-level tadpole)
- Temperatures: $T = 23 - 375$ MeV

- **Soon:**

- Gen3 ($\xi = 7.0$) and Gen2P ($m_\pi = 135$)

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- **Codes:**

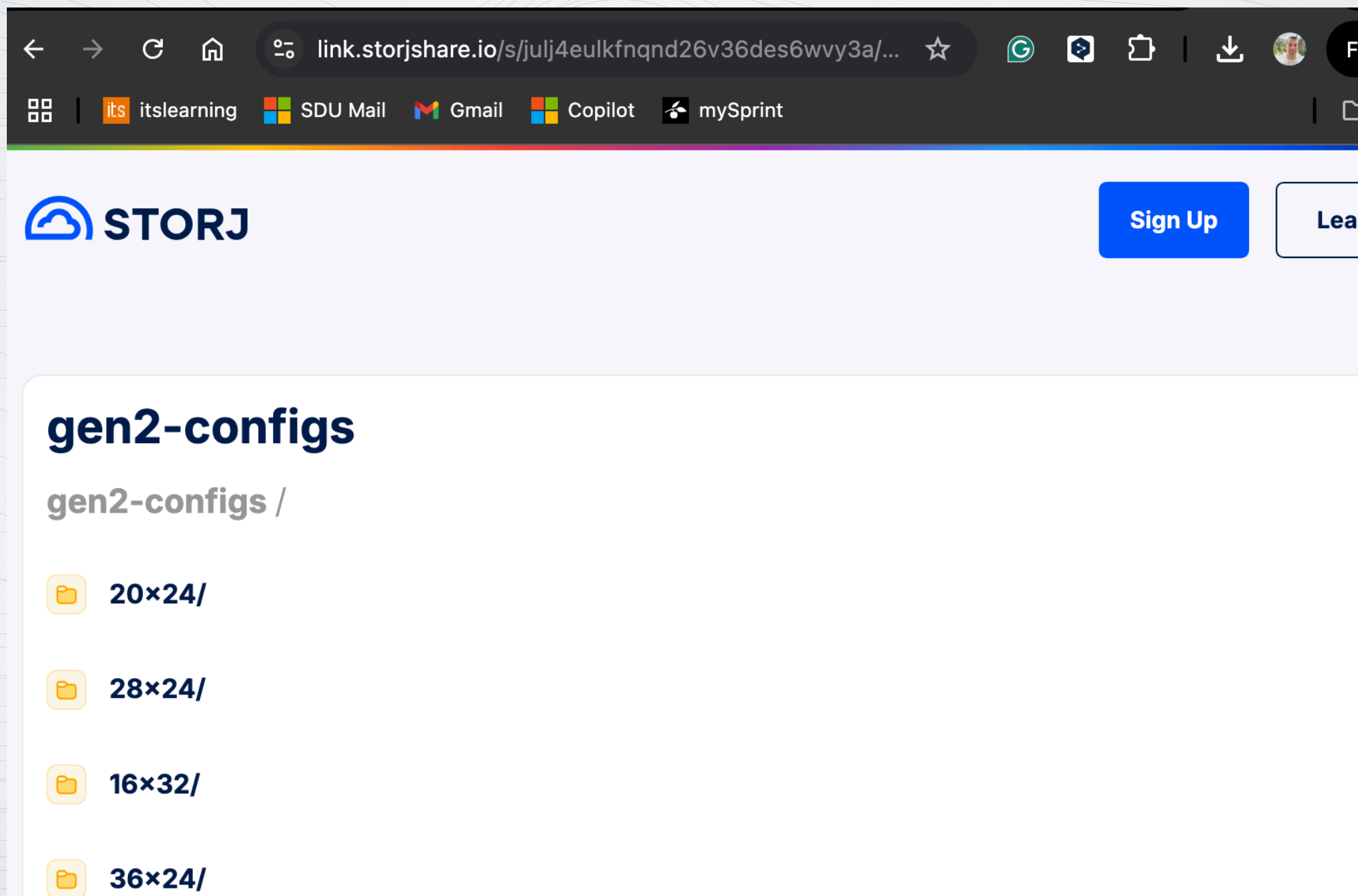
- OpenQCD-FASTSUM (anisotropy and stout link smearing)
- QUDA (Multigrid) + Chroma (used on GPU)

- **Storage:**

- Two servers @ Swansea university (80 TB and 230 TB)
- All ensembles (Gen2 and Gen2L available on **Storj**)
- Published DOI on **Zenodo**

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- **Sharing:**
 - Stroj (access through UK's DiRAC)
 - link.storjshare.io/s/julj4eulkfnqnd26v36des6wvy3a/gen2-configs/



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- **Citable:** Zenodo database
 - DOI allows for citation
 - Human readable + Tagging system

The screenshot shows a web browser window with the Zenodo website. The address bar displays 'zenodo.org/records/8403827'. The Zenodo logo is prominently displayed in the header. Below the header, there is a section for the 'International Lattice Data Grid'. The main content area shows the publication details: 'Published October 3, 2023 | Version v1'. To the right of this, there are two buttons: 'Dataset' and 'Open'. The title of the record is 'FASTSUM Generation 2 Anisotropic Thermal Lattice QCD Gauge Ensembles'. Below the title, the authors are listed: Aarts, Gert¹; Allton, Christopher¹; Amato, Alessandro; Bignell, Ryan¹; Burns, Timothy J.¹; De Boni, Davide¹; Evans, Wynne; Glesaaen, Aleksandra¹; Giudice, Pietro; Hands, Simon²; Harris, Tim³; Jaeger, Benjamin⁴; Kelly, Aoife⁵; Kim, Sevyong⁶; Lombardo, Maria Paola⁷; Nikolaev, Aleksandr¹.

zenodo

International Lattice Data Grid

Published October 3, 2023 | Version v1

Dataset Open

FASTSUM Generation 2 Anisotropic Thermal Lattice QCD Gauge Ensembles

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