# Kubernetes GitOps Workshop

April 27th 2022, CERN

https://indico.cern.ch/event/1145174/



17 MAY
VALENCIA, SPAIN
#GITOPSCON

REGISTER

EXPLORE THE SCHEDULE

https://events.linuxfoundation.org/gitopscon-europe/

Free Virtual Passes with your CERN email <a href="https://codimd.web.cern.ch/eGEqhe2RRpezdNDuSdEYIA">https://codimd.web.cern.ch/eGEqhe2RRpezdNDuSdEYIA</a>

GitOps is an operational framework that takes DevOps best practices used for application development such as version control, collaboration, compliance, and CI/CD, and applies them to infrastructure automation.

GitOps = IaC + MRs + CI/CD

.

https://gitlab.cern.ch/helm/releases/gitops-getting-started https://gitlab.cern.ch/clange/gitops-argo-cd

Managing Kubernetes Deployments with Helm and Flux

From Zero to Running Physics Analysis Workflows with ArgoCD

A Multi-Cluster, Multi-Cloud Infrastructure with GitOps at CERN

And other efforts...

## Workshop Goals

Assess usage of GitOps in the Kubernetes and OpenShift community at CERN

Keep the focus on real use cases, several in production

**Share** experiences on usage of the multiple GitOps Tools

ArgoCD, Flux v1 and v2, GitLab CI, ...

Consider consolidation of these efforts moving forward

31/3-004 - IT Amphitheatre, CERN	09:10 - 09:35
The way of the force: GitOps on JEEDY	Antonio Nappi et al.
31/3-004 - IT Amphitheatre, CERN	09:35 - 10:00
Abusing helm library chart and values for fun and profit	Arthur Outhenin-Chalandre
31/3-004 - IT Amphitheatre, CERN	10:00 - 10:25
Coffee Break	
31/3-004 - IT Amphitheatre, CERN	10:25 - 10:40
RCS-SIS' collaborations hosting	Benjamin Bergia
31/3-004 - IT Amphitheatre, CERN	10:40 - 11:05
GitOps for Web Frameworks: ArgoCD, Gitlab CI and custom operators	Jack Henschel et al.
31/3-004 - IT Amphitheatre, CERN	11:05 - 11:30
GitOps in MONIT	Luca Bello
31/3-004 - IT Amphitheatre, CERN	11:30 - 11:55
Shhh It's a Secret!	Ricardo Rocha

Radu Carpa

11:55 - 12:20

K8s and GitOps for ATLAS Rucio operation

31/3-004 - IT Amphitheatre, CERN

### Discussion and Next Steps

#### **Online Document**

Starter for the discussion at the end of the workshop

Hopefully a good base to move things forward in this area

Thanks to all speakers and participants!