



**FOSDEM '19**

**Brussels 2 & 3 February 2019**

[www.fosdem.org](http://www.fosdem.org) »

Free  
Software  
Radio  
Devroom

Event	Speakers	Start	End
<b>Sunday</b>			
Intro to the Free Software Radio Track		09:00	09:15
gr-soapy: A handy SDR hardware interface module for GNU Radio	Nestoras Sdoukos	09:15	09:30
GNU Radio with a Rusty FPGA <i>Experiment building FPGA accelerated blocks with Rust bindings</i>	Brennan Ashton	09:30	10:00
Protect your bits: Introduction to gr-fec <i>A look into the error-correction capabilities of GNU Radio</i>	Martin Braun	10:00	10:30
GNU Radio meets Scapy	Bastian Bloessl	10:30	11:00
GNU Radio in 2019: Facts and Plans <i>An overview of where GNU Radio is going this fine year</i>	Marcus Müller	11:00	11:45
libsigmf: Human Tools for Extra-Terrestrial and AI Radios	Ben Hilburn, Nathan West	11:45	12:30
SDR Makerspace <i>sdrmaker.space</i>	Alexandru Csete	12:30	13:00
Digital Predistortion <i>Implementation and Use</i>	Derek Kozel	13:00	13:30
Equinox: A C++11 platform for realtime SDR applications	Manolis Surligas	13:30	14:00
An End-to-End LTE Testbed in Three Clicks	Andre Puschmann	14:00	14:30
Spoofing GPS <i>is it really the time we think it is, and are we really where we think we are ?</i>	Jean-Michel Friedt	14:30	15:00
The Dwingeloo radio telescope goes SDR	Paul Boven	15:00	15:30
Performing Low-cost Electromagnetic Side-channel Attacks using RTL-SDR and Neural Networks	Pieter Robyns	15:30	16:00
Decoding Meteor-M2: QPSK, Viterbi, Reed Solomon and JPEG <i>from IQ coefficients to images, analysis of digital weather satellite transmissions</i>	Jean-Michel Friedt	16:00	16:30
Flushing the Delay Line <i>Closing out the Free Software Radio Devroom</i>		16:30	17:00

**The  
(Free Software SDR) Year  
in Review**

# GNU Radio

- Organization now has a simple org structure, there's Ben at the top, and a band of merry men as the leadership Team.



A screenshot of the GitHub pull requests page for the gnuradio organization. The page shows a list of 33 open pull requests. The top navigation bar includes links for Code, Issues (284), Pull requests (33), Projects (2), and Insights. A search bar contains the text "is:pr is:open". A green button labeled "New pull request" is visible in the top right. The list of pull requests includes titles like "grc: parse prefix for numeric values", "grc: fix for GRC's block hotkeys", "Modtool: Fix python version incompatibility", "QtGui: fix 'Show Msg Port' slider", "Add C++ generation support to gr-filter", "GRC: fix embedded python block", and "dtv: Expand LDPC lut array size for worst case table generation". Each entry shows the issue number, the time since it was opened, the author's name, and the number of comments.

# GRCCon '18

- Biggest conference dedicated fully to open source software radio, yet again!
- Over 300 SDR enthusiasts
- Las Vegas, NV
- All videos are available online
- Publications available online, as well

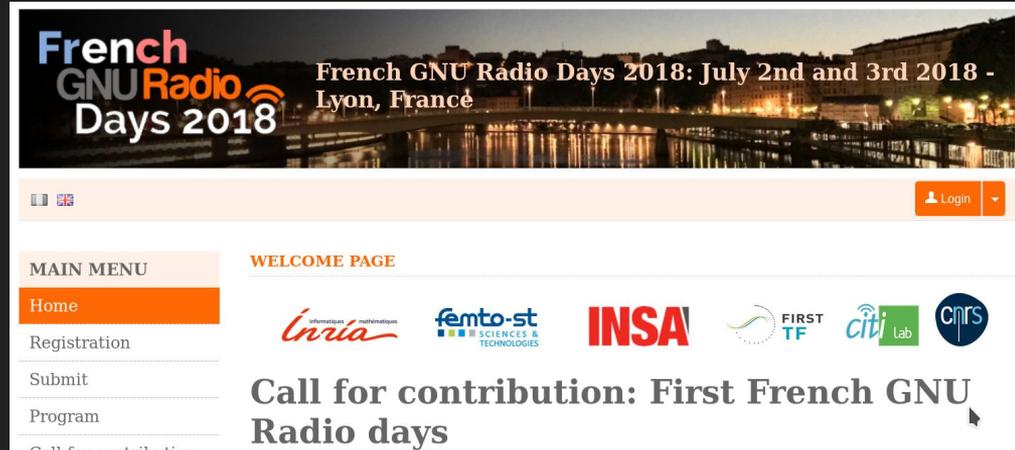
## Summary

- In the last year, the GNU Radio community has continued to grow, and the project has seen a substantial increase in activity and contributions.
- We need to be thinking about how to keep pushing GNU Radio forward, and how to reach sustainable development & maintenance.
- If you want to get involved, contribute, or just chat, please do!



# French GNU Radio Days

- Biggest conference dedicated fully to open source software radio, yet again!
- Over 300 SDR enthusiasts
- Las Vegas, NV
- All videos are available online
- Publications available online, as well



The screenshot shows the homepage of the French GNU Radio Days 2018 website. The header features a banner with the event title "French GNU Radio Days 2018" and the dates "French GNU Radio Days 2018: July 2nd and 3rd 2018 - Lyon, France" over a night cityscape. Below the banner is a navigation bar with a "Login" button. A "MAIN MENU" sidebar on the left lists "Home", "Registration", "Submit", and "Program". The main content area is titled "WELCOME PAGE" and displays logos for partner organizations: Inria, femto-st (Sciences & Technologies), INSA, FIRST TF, citi Lab, and CNRS. A prominent call to action reads "Call for contribution: First French GNU Radio days".

# EU GNU Radio Days 2019

- Ask JMF
- In Besancon, France



European  
GNU Radio  
Days 2019

PlutoSDR tutorial ANALOG DEVICES  
AHEAD OF WHAT'S POSSIBLE™

ROHDE & SCHWARZ  
femto-st  
SCIENCES & TECHNOLOGIES

FIRST  
TF

Ensimm  
Ecole Nationale Supérieure de  
Mécatronique et des Microtechniques

citi  
lab

OposSOM

GDR

## Call for contributions:

- Software Defined and Cognitive Radio
- RF design (frontend, embedded systems)
- RADAR design
- GNU Radio blocks design
- Satellite and GNSS applications

June 17 & 18, 2019 in Besançon, France  
[gnuradio-fr-19.sciencesconf.org](http://gnuradio-fr-19.sciencesconf.org)



# Wireless CTF

- IEEE SB KA
- Defcon
- ...many other places

5<sup>th</sup> IEEE

Signal Intelligence Challenge



LOST IN SPACE

26.10.2018 - 22.11.2018

ieee-ka.de

Kickoff 25.10. um 17:30 | CEL

@ieee\_ka



PROCITEC®

Ettus  
Research

/IEEE/sb.ka  
IEEE Student Branch Karlsruhe

# Devroom Logistics

- We will stick to the schedule! We will not start early, and not finish late.
- The room can only take so many people, so apologies if we have to leave you standing outside
- The last 30 minutes we'll skip talks so we can have a chat (and clean up, and be in time for the closing talks)

# Let's get cracking!

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