



# GNU Radio Conference 2021

## Monday, September 20, 2021

### Main Track - Coliseum Ballroom (11:00 AM - 12:00 PM)

time	[id] title	presenter
11:00 AM	[33] Managing GNU Radio Installations with Conda: A How-to for Everyone from Users to Developers	VOLZ, Ryan
11:30 AM	[25] GNU Radio hits the Bullseye	BOTTOMS, Maitland

### Main Track - Coliseum Ballroom (1:00 PM - 3:00 PM)

time	[id] title	presenter
1:00 PM	[111] Sponsor Lightning Talk: BlackLynx	SORBER, David
1:05 PM	[137] Capture the Signal Introduction	MAGGI, Federico BALDUZZI, Marco
1:15 PM	[110] Peraton Labs: Secure Sense	Dr PORTUNE, Andrew
1:20 PM	[135] GNU Radio and SETI - A Growing Collaboration	CROFT, Steve
1:25 PM	[8] A Newbie's Guide to the GNU Radio Universe	DUGGAN, Barry
1:35 PM	[84] A GNU Radio SETI Pipeline for the Allen Telescope Array	CHAI, Michelle Yiwei
1:45 PM	[40] Reverse Engineering Smart Meters	SALEHI, Hash
2:15 PM	[92] View-Only Mode in GRC	EKHOLM, Oscar
2:30 PM	[82] Radio Resilience, LLC: Radio Resilience Competition at GRCon!	Mr KNIGHT, Matt Mr NEWLIN, Marc Mr SIJBRANDIJ, Sid

### Main Track - Coliseum Ballroom (3:20 PM - 5:00 PM)

time	[id] title	presenter
3:20 PM	[130] Microsoft: Azure ♥ GNU Radio	SCHILINSKI , Steve
3:25 PM	[29] libIIO and the new mainline module gr-iio	Mr CERCUEIL, Paul
3:55 PM	[113] Simple Diversity and MIMO Techniques in GNU Radio	ETTUS, Matt
4:55 PM	[115] The GNU Radio UX group (and what we can do for you)	TYERS, Bernard

## Tuesday, September 21, 2021

### Main Track - Coliseum Ballroom (11:00 AM - 12:00 PM)

time	[id] title	presenter
11:00 AM	[30] The State of GNU Radio Accelerator Device Support	SORBER, David
11:30 AM	[101] NI: New Capabilities for Comms, Radar, & EW with an SDR-based Research Platform	NELSON, Haydn

### Main Track - Coliseum Ballroom (1:05 PM - 3:00 PM)

time	[id] title	presenter
1:05 PM	[125] Rampart Communications: Next Generation Wireless Security	PALMISANO, Keith
1:10 PM	[114] Open hardware and software 400 MSPS USB Digitizer with COTS	JAUREGUI GARCIA, Jose Miguel
1:15 PM	[26] gr-genalyzer, a new OOT module to characterize data converter performance	PAGADARAI, Srikanth
1:45 PM	[116] ARDC: Overview and Applying for Grants	HAYS, John
2:00 PM	[68] PMTs with flatbuffers and modern C++	SALLAY, John
2:30 PM	[126] Epiq Solutions: Detecting 5G Cells	MADSEN, Aaron

### Main Track - Coliseum Ballroom (3:15 PM - 5:05 PM)

time	[id] title	presenter
3:15 PM	[21] Channel Leakage Cancellation for Software Defined Radio (SDR) Narrowband Radar Interferometry Using GNU Radio	CAI, Victor
3:45 PM	[22] Adventures in RFNoC: Lessons Learned From Developing a Real-Time Spectrum Sensing Block	MATTINGLY, Rylee
4:15 PM	[107] Mixed Reality Visualization in Automotive SDR Networks	LADRON DE GUEVARA CONTRERAS, Sharon Dr CLARK, Meghan
4:20 PM	[128] A New Experimental Setup for Collecting nRF2.4 and LoRa Devices Signatures for Machine Learning based Device Authentication	ZENG, Zheng HEMMINGER, William ABDALLAH, Abdallah
4:30 PM	[112] Multi-Receiver Real-time Physical Intrusion Detection "Burglar Alarm" with GNU Radio and USRP N310	SWASEY, Daren
4:45 PM	[104] Interior Target Tracking Using Digital Communications Signals for Bistatic Radar with Gnu Radio	MOON, Todd K.
5:00 PM	[119] RRC Daily Leaderboard	KNIGHT, Matthew Mr NEWLIN, Marc

# Wednesday, September 22, 2021

## Main Track - Coliseum Ballroom (9:45 AM - 10:15 AM)

time	[id] title	presenter
9:45 AM	[42] SigMF v1.0.0 Update	HILBURN, Ben GILBERT, Jacob

## Main Track - Coliseum Ballroom (10:30 AM - 12:00 PM)

time	[id] title	presenter
10:30 AM	[140] Deepwave Digital: Artificial Intelligence Radio Transceiver with on-board GPU	ZURITA, Jeff
10:35 AM	[4] Modular transmit / receive station control	DUGGAN, Barry
11:00 AM	[20] Deep space reception by AMSAT-DL	ESTÉVEZ, Daniel
11:30 AM	[47] GNU Radio at the Allen Telescope Array	PISCOPO, Michael

## Main Track - Coliseum Ballroom (1:00 PM - 3:00 PM)

time	[id] title	presenter
1:00 PM	[127] Epiq Solutions: Breaking through the 6 GHz Barrier	ORLANDO, John
1:10 PM	[37] Rampart Communications: Cryptographic Modulation: Zero-Attack-Surface Wireless	
1:40 PM	[86] Upstreaming gr-pdu: summary and path forward	GILBERT, Jacob
1:55 PM	[19] Embedded Computer Solutions for SDRs running GNU Radio	MOORE, Jeffrey
2:25 PM	[34] Defensive 5G	MAIR, Eric
2:55 PM	[131] Microsoft: Azure Orbital	SHELAR, Hrishu

## Main Track - Coliseum Ballroom (3:20 PM - 5:05 PM)

time	[id] title	presenter
3:20 PM	[136] Vesperix: Cooking from Scratch: Designing and Building a Microwave SDR	
3:25 PM	[32] A new Linux kernel subsystem for JESD204 RF Transceiver Systems	HENNERICH, Michael
3:55 PM	[88] Automated build and testing GNURadio with QEMU	BALISTER, Philip
4:05 PM	[96] Demonstration of GNU Radio High Data Rate BPSK 10 Mbps Modem Real-Time with Only Multi-Core General Purpose Processors	MILLER, David
4:10 PM	[105] Meet the Family: RFNoC Blocks in UHD	ROSSETTO, Aaron
4:30 PM	[41] WISCANet - SDR Networks using GNURadio and Python	HOLTOM, Jacob
5:00 PM	[121] RRC Daily Leaderboard	KNIGHT, Matthew Mr NEWLIN, Marc

## Thursday, September 23, 2021

### Main Track - Coliseum Ballroom (9:45 AM - 10:15 AM)

time	[id] title	presenter
9:45 AM	[17] LLLama and the Lake Monster: SDR in Neutral Atom Quantum Computing	Dr COXE, Robin

### Main Track - Coliseum Ballroom (10:40 AM - 12:00 PM)

time	[id] title	presenter
10:40 AM	[124] Rampart Communications: Rampart is its Employees	JOHNSON, Lauren
10:45 AM	[49] Passive bistatic RADAR using spaceborne Sentinel1 non-cooperative source, a B210 and a Raspberry Pi4	FRIEDT, Jean-Michel
11:15 AM	[94] RF Spectral Convergence System Implementation on USRPs using GNURadio	Mr FU, Yukang
11:30 AM	[133] Analog Devices: Implementing OFDM Radar & DOA on DirectRF Platforms using IIO and GNURadio	GETZ, Robin

### Main Track - Coliseum Ballroom (1:00 PM - 3:00 PM)

time	[id] title	presenter
1:00 PM	[100] NI: Meet the USRP Makers	BRAUN, Martin
1:30 PM	[46] Analysis of an Open Channel Identifier using Stochastic Gradient Descent and GNU Radio	Ms BEARD, Ashley Mr SHARP, Steven
2:00 PM	[87] GPUs in Software Defined Radio	FERGUSON, John THOMPSON, Adam
2:30 PM	[85] gr-tempest: Spying Video Interfaces Through Electromagnetic Emanations	LARROCA, Federico

### Main Track - Coliseum Ballroom (3:25 PM - 4:30 PM)

time	[id] title	presenter
3:25 PM	[27] RF Sim, Azure Orbital, and Spectrum Processing on Azure	POMEROY, Craig Mr SHELAR, Hrishi
3:55 PM	[28] pyadi-jif: JESD204 tools for mere mortals	COLLINS, Travis
4:25 PM	[120] RRC Final Results	KNIGHT, Matthew Mr NEWLIN, Marc