



# GNU Radio Conference 2023

## Tuesday, September 5, 2023

### Main Track - Arizona (MU 221) (11:00 AM - 12:00 PM)

time	[id] title	presenter
11:00 AM	[123] IQEngine Project Update and Demo	LICHTMAN, Marc
11:30 AM	[148] From 4.4 to 440: Another year of USRP and UHD Updates	BRAUN, Martin

### Main Track - Arizona (MU 221) (1:00 PM - 2:40 PM)

time	[id] title	presenter
1:00 PM	[129] Design and implementation of a multi-node optical wireless communication testbed for centralized configuration and adaptation of system parameters using GNURadio's XML-RPC and ZMQ modules	ONWUCHEKWA, Chukwunodebem RAHAIM, Michael
1:15 PM	[121] GNU Radio and the Allen Telescope Array	FARAH, Wael
1:45 PM	[131] Ad Hoc Sensor Nets used in a Rail Environment	Mr ALLDRITT, Michael
2:15 PM	[115] Low-Cost Educational Kit for 21-cm Observations of the Milky Way	Ms BERKHOUT, Lindsay BERKHOUT, Lindsay
2:30 PM	[135] Visualization of Signal Processing for Radio Astronomy	ASHCROFT, Kaitlyn

### Main Track - Arizona (MU 221) (3:20 PM - 5:00 PM)

time	[id] title	presenter
3:20 PM	[101] Lo and behold, no LO! Direct Sampling techniques in SDR	BRAUN, Martin
3:50 PM	[106] Evaluating GPP Predictors for Software Based Waveform Performance	BLAIR, William
4:05 PM	[136] Automatic Classification of FEC	TURNER, Rafael
4:35 PM	[111] GNU Radio realization of Waveform Co-design for Joint Radar-Communications system using SDRs	DOLY, Shammi A.

## Wednesday, September 6, 2023

### Main Track - Arizona (MU 221) (11:00 AM - 11:45 AM)

time	[id] title	presenter
11:00 AM	[132] WSDR - web based SDR platform for learning, hacking and callobaration	AVTUSHENKA, Andy
11:30 AM	[154] Sponsor Talk: Analog Devices	

### Main Track - Arizona (MU 221) (1:00 PM - 2:45 PM)

time	[id] title	presenter
1:00 PM	[102] BLADE: The Allen Telescope Array CUDA-accelerated Real-Time DSP Library	CRUZ, Luigi
1:30 PM	[104] Beamforming Using Volumetric Arrays and Computer Vision	CAMPBELL, Bailey
2:00 PM	[130] Implementation of Software-Defined Antenna and Radio Test System for Congested Spectral Environments	Dr RAHAIM, Michael
2:15 PM	[97] Phased Array FMCW Radar using the "Phaser" and GNU Radio Companion	KRAFT, Jon THOREN, Mark

### Main Track - Arizona (MU 221) (3:20 PM - 4:50 PM)

time	[id] title	presenter
3:20 PM	[113] Ultra-wideband SDR architecture for AMD RFSocCs using PYNQ based GNU Radio blocks	Mr SIAUCIULIS, Marius
3:35 PM	[117] Employing GNU Radio for Robust Testing of the Novel DASH SoC	SILBERNAGEL, Drake HEMANTH, Prithvi SIDDIQUI, Saquib CHIRIYATH, Alex
3:50 PM	[110] Phase coherence in Radio Interferometry: using, and measuring, White Rabbit with GNU Radio	BOVEN, Paul
4:20 PM	[159] SETI Institute	STEEL, Simon

# Thursday, September 7, 2023

## **Main Track - Arizona (MU 221) (11:00 AM - 11:45 AM)**

time	[id] title	presenter
11:00 AM	[120] Polymorphic Types of the Future	SALLAY, John

## **Main Track - Arizona (MU 221) (1:00 PM - 3:00 PM)**

time	[id] title	presenter
1:15 PM	[103] Behind CyberEther: Metal Hardened Portable GPU Accelerated Interface	CRUZ, Luigi
1:45 PM	[164] The Future of Spectral Use	Prof. BLISS, Dan
2:15 PM	[139] High Accuracy Wireless Timing Synchronization Using Software Defined Radios	MERLO, Jason M.

## **Main Track - Arizona (MU 221) (3:20 PM - 5:05 PM)**

time	[id] title	presenter
3:20 PM	[142] TorchSig Update	VANHOY, Garrett
3:35 PM	[143] Amateur Radio, DSP and GNU Radio	MCQUIGGIN, Kevin
4:05 PM	[144] General-Purpose Phased Array Learning Kit: Efficient Interference Mitigation	GETZ, Robin

## Friday, September 8, 2023

### Main Track - Arizona (MU 221) (9:00 AM - 9:30 AM)

time	[id] title	presenter
9:00 AM	[128] Receiving Faxes with GNU Radio	DEMORAT, Matthew

### Main Track - Arizona (MU 221) (10:30 AM - 11:45 AM)

time	[id] title	presenter
10:30 AM	[114] File Transfer using Packet and BPSK	DUGGAN, Barry
11:00 AM	[118] Demodulation demonstration using the LightCube CubeSat	BERKHOUT, Lindsay BERKHOUT, Lindsay
11:15 AM	[95] Measuring time delays with sub-sampling period resolution: qualification of some COTS SDR RF frontends with sub-100 ps resolution	FRIEDT, Jean-Michel

### Main Track - Arizona (MU 221) (1:00 PM - 2:45 PM)

time	[id] title	presenter
1:00 PM	[98] Wireless Signal Processing Education	SEVER, Murat SEVER, Murat
1:15 PM	[93] Design of a 1296 MHz SDR Radio System for EME	ROSENAUER, Dennis
1:45 PM	[105] A brief overview of the ALBATROS cosmology experiment	MCGEE, Francis
2:00 PM	[99] ALS162 Time Signal SDR Receiver for GNU Radio	MAIER, Henning
2:15 PM	[116] Open-Source Antenna Pattern Measurement System: Collaborative Development and Applications	Dr WEST, Jonathn

### Main Track - Arizona (MU 221) (3:20 PM - 4:20 PM)

time	[id] title	presenter
3:20 PM	[119] Advancing Ground Station Capabilities: A Web-based Application with GNU Radio for Seamless Satellite Tracking and Communication	RIVERA, Adriana
3:35 PM	[126] OFDM Based Joint Communications and Human Vital Sign Sensing with GNU Radio	AKKSHAI VENKATARAMANI, Adarsh LENZ, Isabella
3:50 PM	[133] Introducing RSESS: An Open-Source Enumerative Sphere Shaping Implementation Coded in Rust	Mr RITTER, Frederik