

169
researchers



16 M€

Revenue 2013-2015



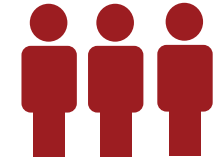
6 FP7

2 H2020
Last 5 years

86 **78** **97**
2013 **2014** **2015**

Journal papers

ICT R&D Private
Technology Center



90
employees

Gradiant
CENTRO TECNOLÓGICO DE
TELECOMUNICACIONES DE GALICIA
Luis Pérez Roca
Advanced Commun.Area

> **100** clients

> **60** active projects

EU acknowledgement as
Excellence Center

ICT research
center at UVIGO

AtlantTIC
Universidade de Vigo

Nuria González Prelcic
Signal Processing in
Communications Group



7 FP7

2 H2020

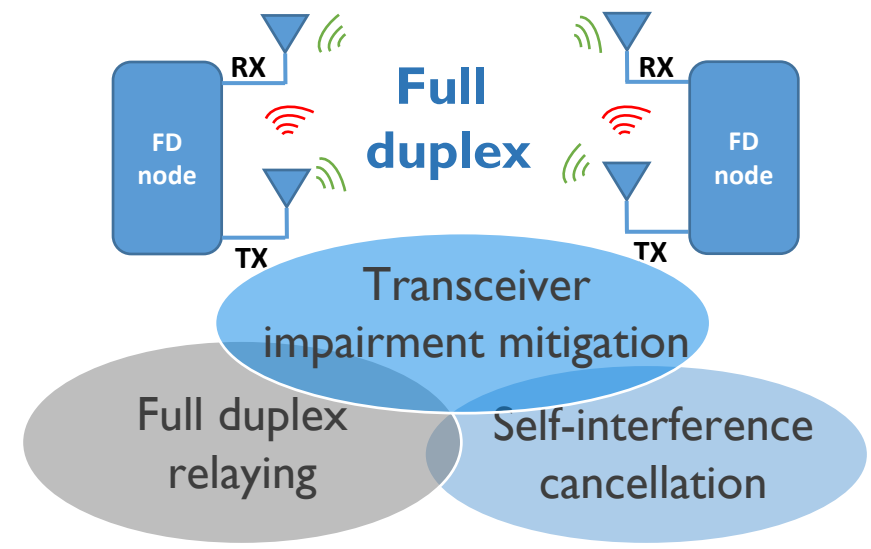
Last 5 years

Expertise on wireless communications for 5G



MmWave communications

TA1, TA2, TA3
TA4, TA6, ...*



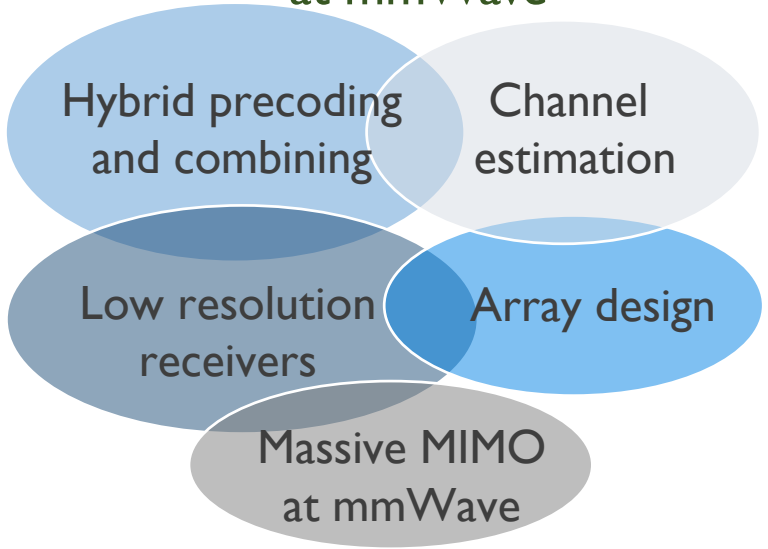
Full duplex

Transceiver impairment mitigation

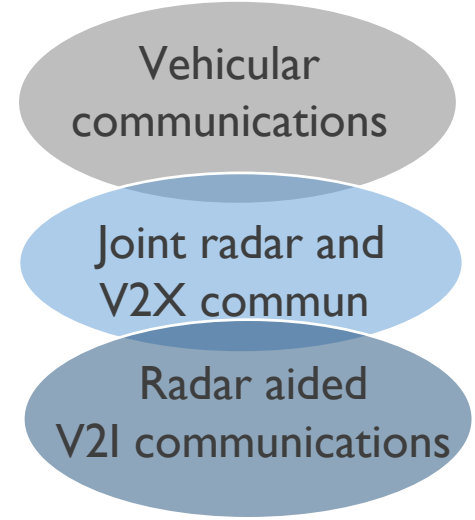
Full duplex relaying

Self-interference cancellation

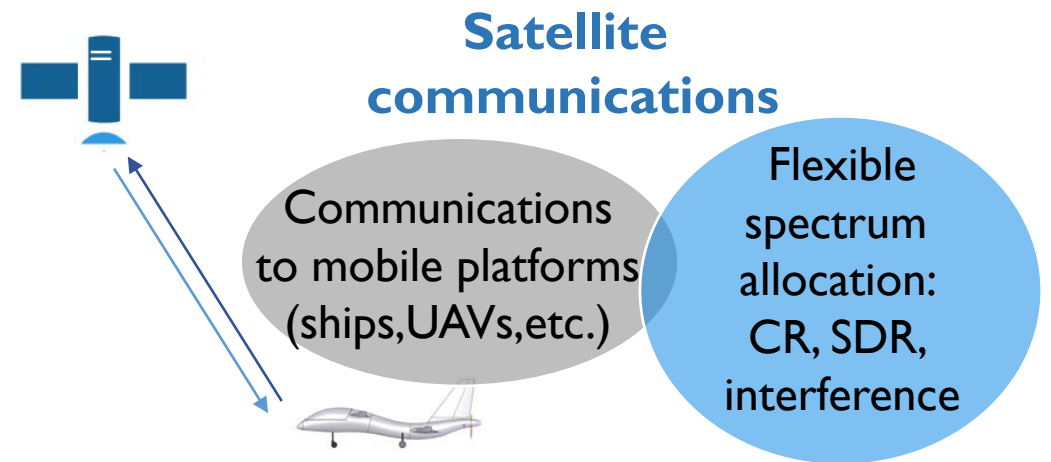
MIMO architectures at mmWave



MmWave in transportation



Technologies for some 5G Phase 2 TAs



Satellite communications

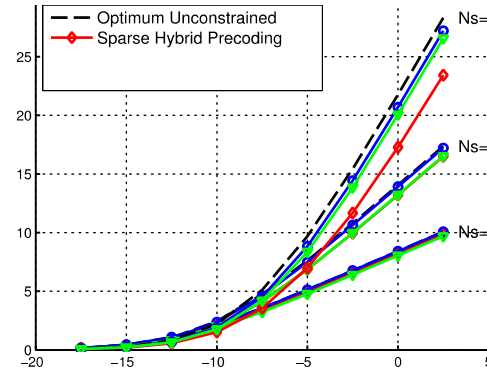
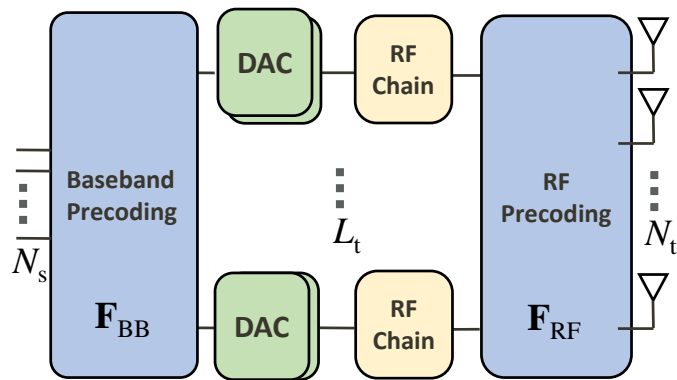
Communications to mobile platforms (ships, UAVs, etc.)

Flexible spectrum allocation: CR, SDR, interference

*Targeted actions for Phase 2 Pre-structuring Model – ICT 7

Recent results

Low complexity hybrid precoding designs Power/bit rate tradeoffs at mmWave



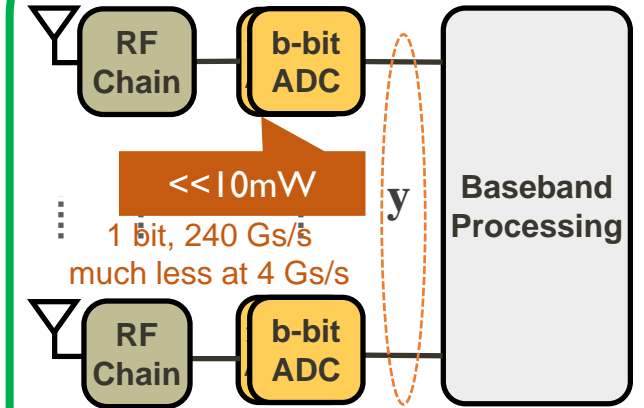
IEEEAccess 2016, IEEE Communications Mag. 2014, IEEE JSTSP 2016, ICC 2015, SPAWC 2015, CAMPSAP 2016

S-band adaptive SDR-based transceiver



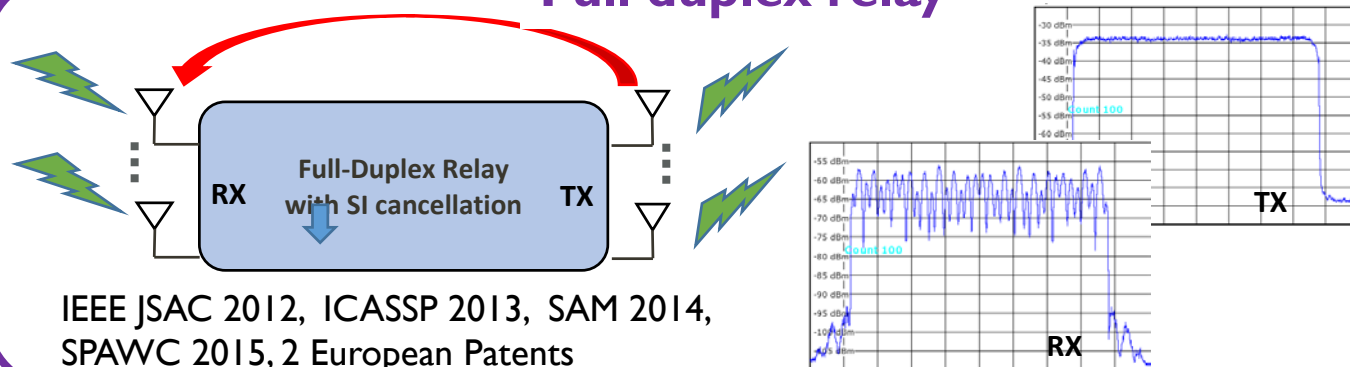
ASMS 2014
Best paper award

I-bit mWave receivers



Asilomar 2014, Asilomar 2015,
Globecom 2015, ICASSP 2016

Full duplex relay



IEEE JSAC 2012, ICASSP 2013, SAM 2014,
SPAWC 2015, 2 European Patents

MmWave joint radar & vehicular communications prototype

Phase 1
MIMO 2x2 BB
prototype, 1GHz BW

Phase 2
Radar processing
Low latency coding