



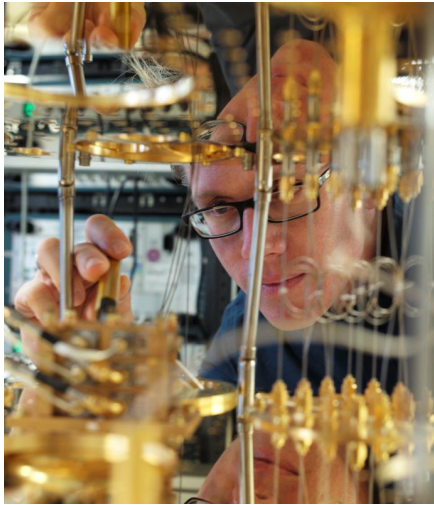
Building quantum sensors for the healthcare industry and the world

Mathieu Munsch
Cofounder and CEO Qnami AG

EPIC Online Quantum Technology Meeting
12 March 2021

Seeing the invisible

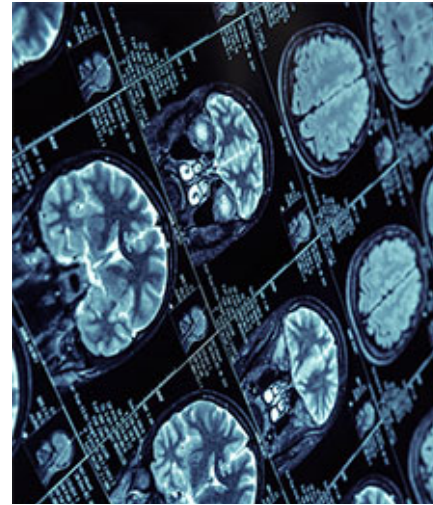
Quantum sensors will impact a wide range of industries under-going rapid change, including healthcare



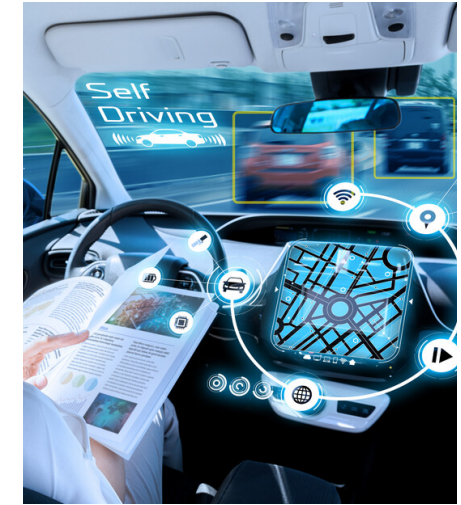
RESEARCH
2D Materials



SEMICONDUCTOR
Beyond Moore's law



HEALTHCARE
Early stage diagnostics



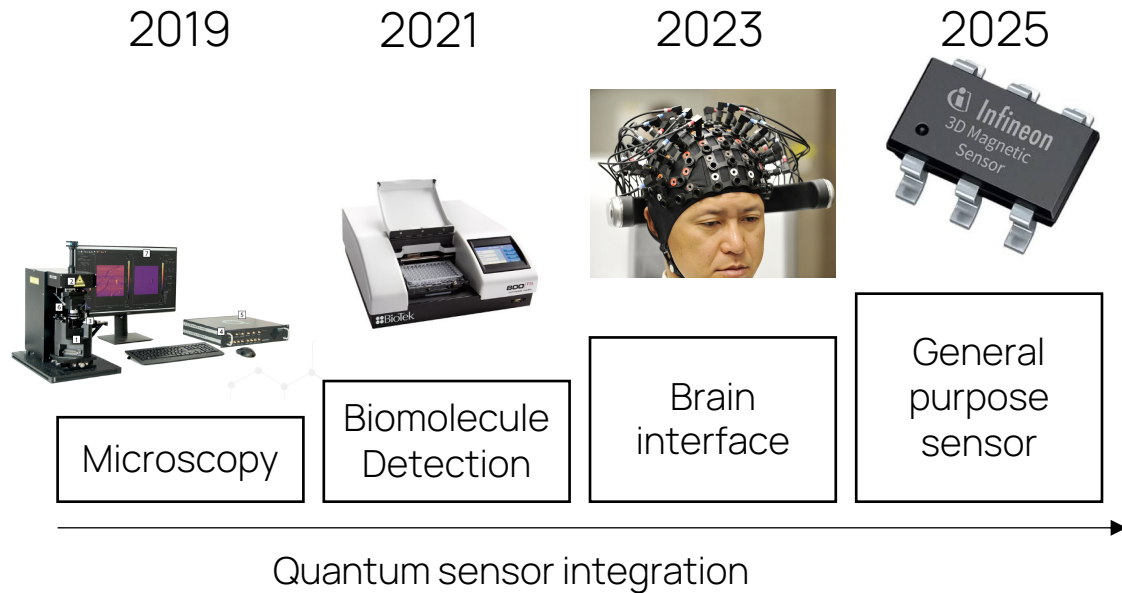
NAVIGATION
Secure ge positioning system

The unique precision & accuracy of quantum sensors allow to measure what has never been measurable before

Enabling the quantum revolution

A quantum ecosystem is needed to address key challenges in core technology.

Leading quantum sensing technology: NV centers in diamond



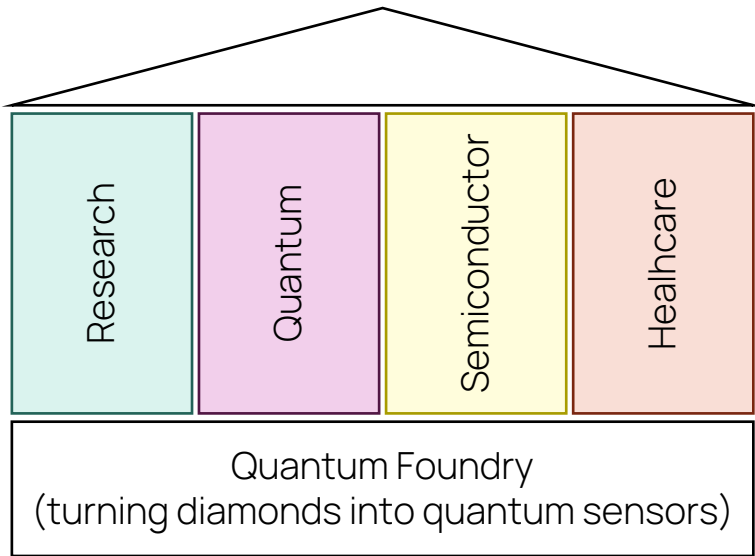
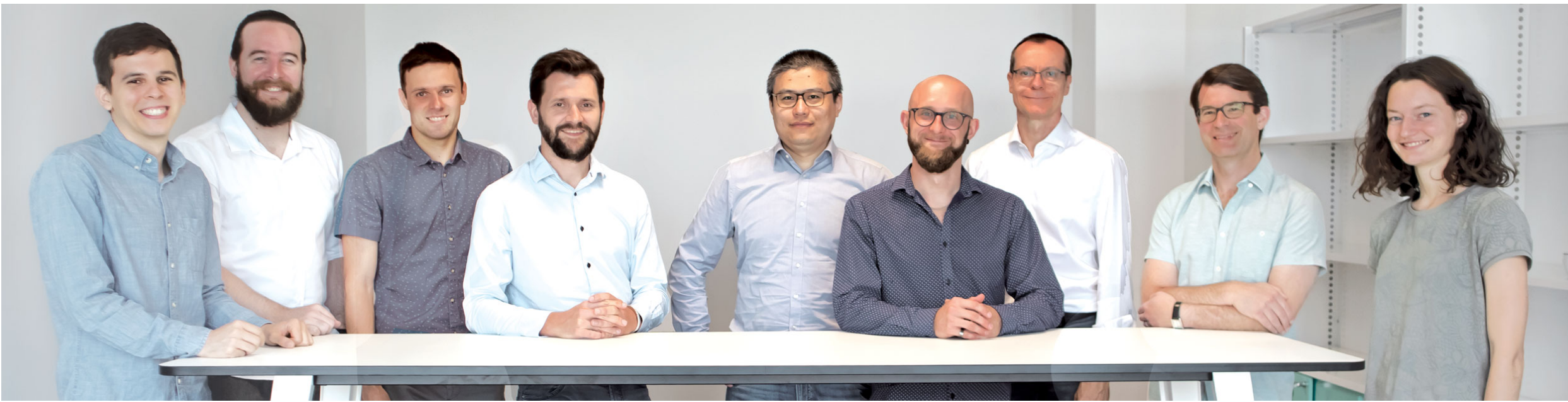
CHALLENGES

- Miniaturization
- Energy footprint
- Manufacturing costs
- Reliable high volume production

OPPORTUNITIES

- First products in market
- Strong EU ecosystem incl. tier-1 RTOs, start-ups & industry leaders
- Government involvement
- The quantum diamond valley: historical expertise in quantum sensing





- Founded in Nov 2017
- 15 people, 11 PhD, 1MBA
- 60+ years experience in quantum (foundry, software, instrumentation)
- >5 MEUR Investment
- International partnerships

Qnami AG, Basel, Switzerland



Qnami AG | www.qnami.ch

Quantum microscope

High resolution scanning probe microscopes powered by diamond quantum sensors unlock new possibilities



Qnami ProteusQ™
(Commercial launch 2019)



THALES

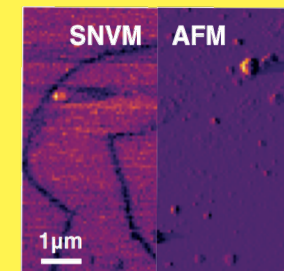


APPLICATIONS

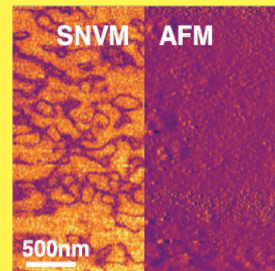
Materials Research (2D materials)
Future of computing (spintronics, quantum computing)
Life-science (nanoscale NMR)

KEY FEATURES

Atomic sensitivity & nanometer spatial resolution
Easy to use
Simultaneous mapping
Unprecedented insights



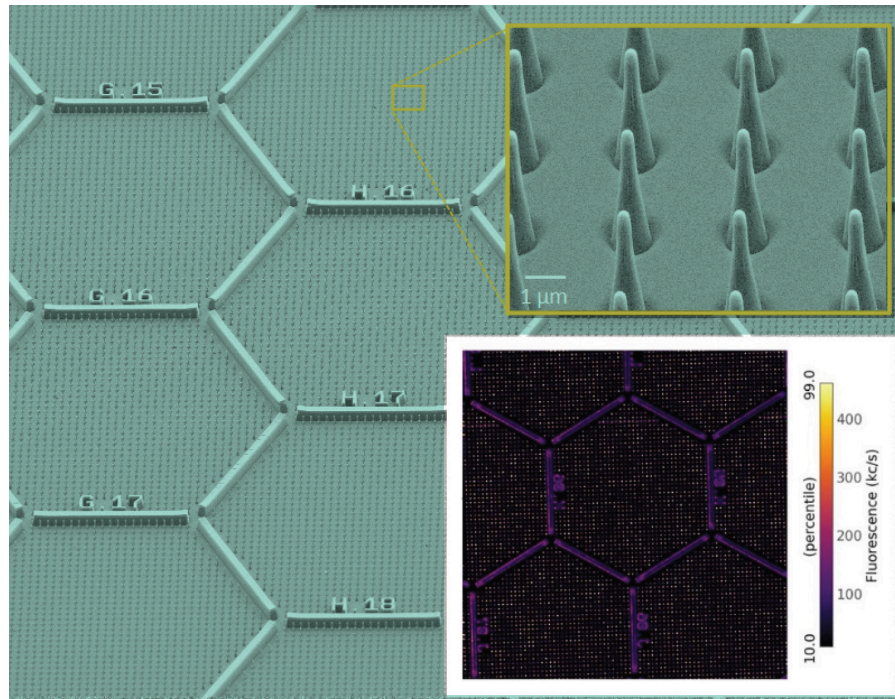
Bi: YIG



Mn₃GaN

Bio sensing chips

Quantum chips for sensing of magnetic bio-markers



APPLICATIONS

Immuno assay detection
Nanoscale chemical compound analysis
Nanoscale MRI

KEY FEATURES

Quantum grade NV diamond
Best spin properties
Boost in sensitivity
Flexible design



the quantum wave

www.qnami.ch

