



For the attention of interested partners and potential investors

The contributions of Biomagnetik Park for
global breakthrough of quantum sensing
based magnetocardiography (MCG) 2022-2025

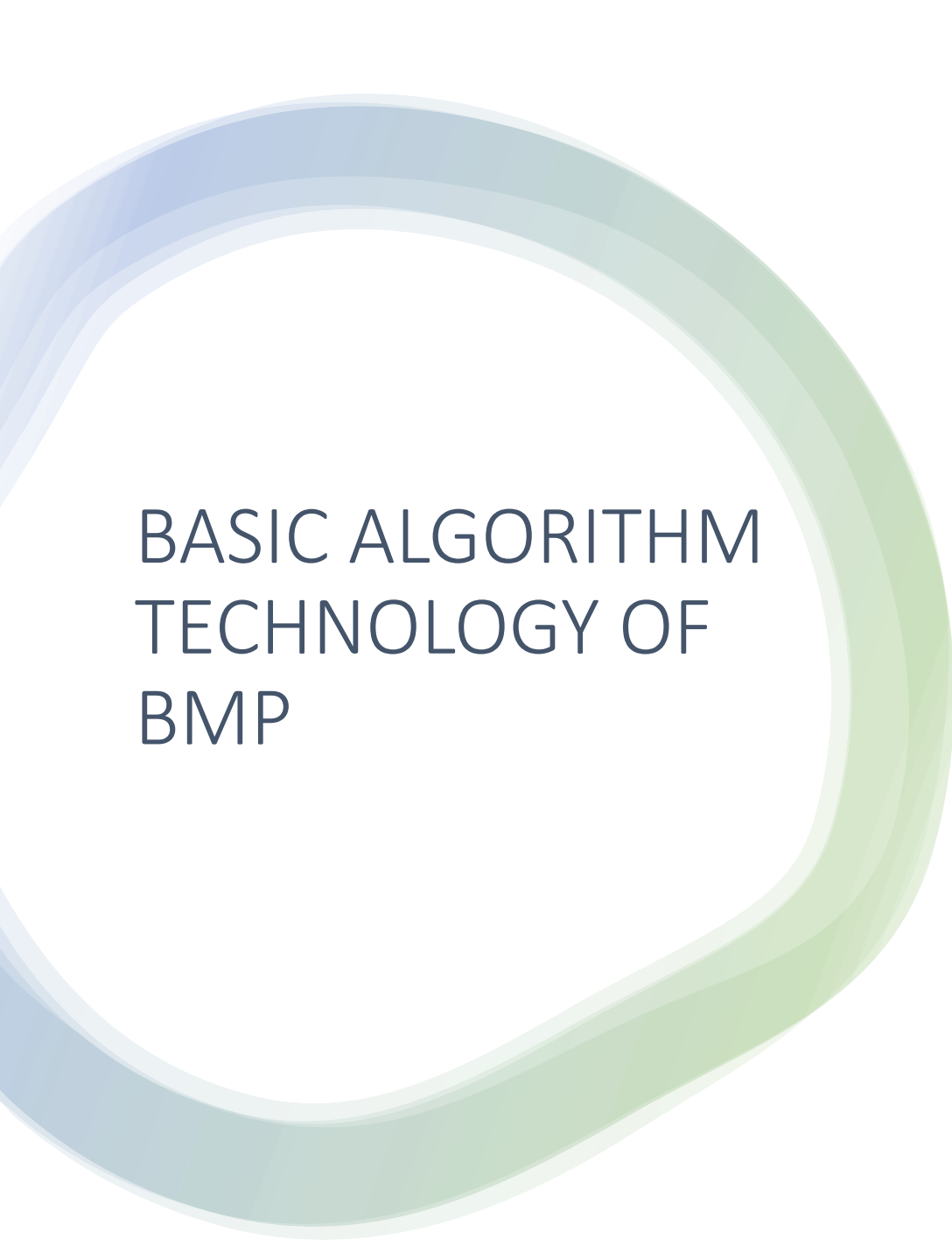
We will lead the next megatrend, see Nature May 2023:
[Quantum sensors will start a revolution - if we deploy them right](#)



bmp CS MAG III
owned by
Biomagnetik Park
at Charité Berlin,
Cardiology,
Campus Benjamin
Franklin



We have five
brand new core
components for
new MCG
platforms in stock.



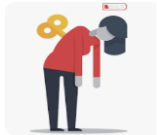
BASIC ALGORITHM TECHNOLOGY OF BMP



In the last 42 months bmp has made major progress with its data and basic algorithm technology:

- Improvement of all bmp algorithms by using novel parameters based on recent findings
- Global attention of the results achieved with first-class partners
- Preparation of the QuantumCardiology-AI deep learning project

INFORMATION ON THE LATEST DIAGNOSTIC BREAKTHROUGHS



POST-COVID DISEASE DETECTION with a sensitivity of 87.5% - determined by a recent pilot study at Charité Berlin. The benefits for research into the causes of PCD and the development of effective therapies will be enormous. In particular, this applies to therapies based on the [research results of Prof. Andrew R. Marks, Columbia University](#). Please request for Teaser “PCD Diagnosis 2023 Nov”.



PREDICTION OF SUDDEN CARDIAC DEATH for patients with acute chest pain with an accuracy of 90.9% based on 191 endpoints (MCG datasets of Yonsei Seoul); [see publication in Frontiers in Cardiovascular Medicine, 2023 Dec](#), EU-patent pending.



MYOCARDITIS DIAGNOSTICS determined with a specificity of 95.0%; see [Charité publication in Journal of the American Heart Association, 2023 Feb](#), US patent pending.



MAGNETOIONOGRAPHY (MIG) ENHANCES DIAGNOSTIC ACCURACY OF MAGNETOCARDIOGRAPHY in coronary artery disease: The inclusion of MIG parameters in a stepwise linear discriminant analysis increased sensitivity from 90.3% (MCG alone) to 93.5% and specificity from 76.5 to 85.3%. MIG is currently the working title for the procedural hypothesis on the contribution of calcium transients to the cardiac magnetic field, which can presumably be detected using highly sensitive magnetic field quantum sensors; see <https://www.nature.com/articles/s41598-025-14054-4> (Aug 2025)

IMPORTANT NEW PENDING PATENTS

The following particularly important new patent applications (pending) are publicly available:

- [Magnetoinography procedure](#), pending since 2022
- [Diagnostics myocarditis](#), 50:50 bmp-Charité, pending since 2023
- [Prognosis of sudden cardiac death](#), 50:50 Yonsei-bmp, pending since 2023



LINK-LIST OF PUBLICATIONS OF THE LAST 30 MONTHS

[Magnetoionography enhances diagnostic accuracy of magnetocardiography in coronary artery disease](#), Nature: Scientific Reports, 2025 August

Application of Artificial Intelligence on Magnetocardiology, [Clinical Hemorheology and Microcirculation](#), accepted in 2024 June

[The Inflammatory Spectrum of Cardiomyopathies](#), Frontiers Cardiovascular Medicine, 2024 January

[Magnetocardiography at rest predicts cardiac death in patients with acute chest pain](#), Frontiers Cardiovascular Medicine, 2023 December

[Cardiac magnetic field map topology quantified by Kullback–Leibler entropy identifies patients with clinically suspected myocarditis](#), Frontiers Cardiovascular Medicine, 2023 November

[Case report: Recurrence of inflammatory cardiomyopathy detected by magnetocardiography](#), Frontiers Cardiovascular Medicine, 2023 September

[Case report: Magnetocardiography as a potential method of therapy monitoring in amyloidosis](#), Frontiers Cardiovascular Medicine, 2023 August

[Magnetocardiography for the detection of myocardial ischemia](#), Frontiers Cardiovascular Medicine, 2023 July

[Application of Magnetocardiography to Screen for Inflammatory Cardiomyopathy and Monitor Treatment Response](#), JAHA, 2023 February

Further fundamental publications are in preparation or in the review process.

VALID APPROVALS AND VALID AND PENDING PATENTS BEFORE 2022

Valid FDA 510k clearance as a clinical research device (USA), 2013:

<https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/pmn.cfm?ID=K121825>

Patent Monopolarity index as basis bmp basic algorithm (EU), granted 2019:

<https://patents.google.com/patent/EP3308703B1/de>

Patent Vector MCG as basis bmp basic algorithm (EU), pending:

<https://patents.google.com/patent/EP3207866A1/en>

Patent non-magnetic ergometer for CMF measurements under stress (USA, KR, HK, EU), granted 2016-18:

<https://patents.justia.com/patent/10004412>

Please request for complete list



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