



## Publikationen des Lehrstuhls

### 2017

- Walk, Philipp ; Jung, Peter ; Pfander, Götz E.:  
**[On the stability of sparse convolutions.](#)**  
*In: Applied and computational harmonic analysis : time-frequency and time-scale analysis, wavelets, numerical algorithms and applications. Bd. 42 (Januar 2017) Heft 1. - S. 117-134.*  
ISSN 1063-5203  
10.1016/j.acha.2015.08.002  
(Peer-Review-Journal) 
- Cabrelli, Carlos ; Lee, Dae Gwan ; Molter, Ursula ; Pfander, Götz E.:  
**[Time-frequency shift invariance of Gabor spaces generated by integer lattices.](#)**  
<https://arxiv.org/abs/1705.02495>, 2017  
arXiv:1705.02495
- Cabrelli, Carlos ; Lee, Dae Gwan ; Molter, Ursula ; Pfander, Götz E.:  
**[Extra invariance and Balian-Low type obstructions for Gabor spaces.](#)**  
*In: Proceedings of 2017 International Conference on Sampling Theory and Applications (SampTA), Tallinn, Estonia. - Tallinn, Estonia, 2017*  
(Begutachteter Beitrag / peer-reviewed paper)
- Pfander, Götz E. ; Zhou, Weiqi:  
**[Irregular Orthonormal Gabor Basis in Finite Dimensions and Applications.](#)**  
*In: Proceedings of SampTA 2017. - Tallinn, Estonia : SampTA, 2017. - S. 303-307*  
ISBN 978-1-5386-1564-5 ; 978-1-5386-1565-2  
10.1109/SAMPPTA.2017.8024467  
(Begutachteter Beitrag / peer-reviewed paper) 

### 2016

- Molahajloo, Shahla ; Okoudjou, Kasso ; Pfander, Götz E.:  
**[Boundedness of multilinear pseudo-differential operators on modulation spaces.](#)**  
*In: The journal of Fourier analysis and applications. Bd. 22 (Dezember 2016) Heft 6. - S. 1381-1415.*  
ISSN 1069-5869 ; 1531-5851  
10.1007/s00041-016-9461-2  
(Peer-Review-Journal) 
- Pfander, Götz E. ; Walnut, David:  
**[Sampling and reconstruction of operators.](#)**  
*In: IEEE transactions on information theory : a journal devoted to the theoretical and experimental aspects of information transmission, processing, and utilization. Bd. 62 (Januar 2016) Heft 1. - S. 435-458.*  
ISSN 0018-9448  
10.1109/TIT.2015.2501646  
(Peer-Review-Journal)
- Cabrelli, Carlos ; Molter, Ursula ; Pfander, Götz E.: 



### **Time-frequency shift invariance and the Amalgam Balian-Low theorem.**

*In:* Applied and computational harmonic analysis : time-frequency and time-scale analysis, wavelets, numerical algorithms and applications. Bd. 41 (2016) Heft 3. - S. 677-691. ISSN 1063-5203

(Peer-Review-Journal)

- Walk, Philipp ; Jung, Peter ; Pfander, Götz E. ; Hassibi, Babak:

### **Ambiguities on convolutions with applications to phase retrieval.**

*In:* Matthews, Michael B. (Hrsg.): Conference Record of the 50th Asilomar Conference on Signals, Systems and Computers. - Pacific Grove, California, 2016. - S. 1228-1234 ISBN 978-1-5386-3954-2

10.1109/ACSSC.2016.7869569

## **2015**

- Pfander, Götz E. ; Zheltov, P.:

### **Estimation of Overspread Scattering Functions.**

*In:* IEEE Transactions on Signal Processing. Bd. 63 (Mai 2015) Heft 10. - S. 2451-2463.

ISSN 1053-587X ; 1941-0476

10.1109/TSP.2015.2403309

(Peer-Review-Journal)

- **Sampling Theory, a Renaissance - Compressive Sensing and Other Developments.**

Hrsg.: Pfander, Götz E.

Basel : Birkhäuser, 2015. - 532 S. - (Applied and Numerical Harmonic Analysis)

ISBN 978-3-319-19748-7

- Walnut, David ; Pfander, Götz E. ; Kailath, Thomas:

### **Cornerstones of Sampling of Operator Theory.**

*In:* Balan Radu ; Begué Matthew ; Benedetto John J. ; Czaja Wojciech (Hrsg.): Excursions in Harmonic Analysis. - Cham : Birkhäuser, 2015. - S. 291-332. - (Applied and Numerical Harmonic Analysis ; 4)

ISBN 978-3-319-20188-7 ; 978-3-319-20187-0

[https://doi.org/10.1007/978-3-319-20188-7\\_12](https://doi.org/10.1007/978-3-319-20188-7_12)

(Begutachteter Beitrag / peer-reviewed paper)

- Pfander, Götz E. ; Walnut, David:

### **Regular operator sampling for parallelograms.**

*In:* Proceedings on the International Conference on Sampling Theory and Applications (SampTA), May 25 - 29, 2015, Washington DC. - Piscataway, New Jersey : IEEE, 2015. - S. 44-47

ISBN 978-1-4673-7353-1 ; 1-4673-7353-2 ; 978-1-4673-7353-1

<https://doi.org/10.1109/SAMPTA.2015.7148847>

(Begutachteter Beitrag / peer-reviewed paper)

- Cabrelli, Carlos ; Molter, Ursula ; Pfander, Götz E.:

### **An Amalgam Balian-Low Theorem for symplectic lattices of rational density.**

*In:* Proceedings on the International Conference on Sampling Theory and Applications (SampTA), May 25 - 29, 2015, Washington DC. - Piscataway, New Jersey : IEEE, 2015. - S. 134-138

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<https://doi.org/10.1109/SAMPTA.2015.7148866>

(Begutachteter Beitrag / peer-reviewed paper)

- Salanevich, Palina ; Pfander, Götz E.:



### **Polarization based phase retrieval for time-frequency structured measurements.**

*In:* Proceedings on the International Conference on Sampling Theory and Applications (SampTA), May 25 - 29, 2015, Washington DC. - Piscataway, New Jersey : IEEE, 2015. - S. 187-191

ISBN 978-1-4673-7353-1 ; 1-4673-7353-2 ; 978-1-4673-7353-1

<https://doi.org/10.1109/SAMPTA.2015.7148847>

(Begutachteter Beitrag / peer-reviewed paper)

## 2014

- Pfander, Götz E. ; Zheltov, Pavel:

### **SIC-POVMs vs WSSUS : Quantum Information Theory meets Channel Estimation.**

Ohne Angabe : EMS Publishing House, 2014. - (Oberwolfach Reports ; 11)

10.4171/OWR/2014/18

- Pfander, Götz E. ; Zheltov, Pavel:

### **Identification of stochastic operators.**

*In:* Applied and computational harmonic analysis : time-frequency and time-scale analysis, wavelets, numerical algorithms and applications. Bd. 36 (2014) Heft 2. - S. 256-279. ISSN 1063-5203

(Peer-Review-Journal)

- Oktay, O. ; Pfander, Götz E. ; Zheltov, P.:

### **Reconstruction of the scattering function of overspread radar targets.**

*In:* IEEE Transactions on Signal Processing. Bd. 8 (2014) Heft 9. - S. 1018-1024.

ISSN 1053-587X ; 1941-0476

(Peer-Review-Journal)



## 2013

- Pfander, Götz E. ; Rashkov, Peter:

### **Remarks on multivariate Gaussian Gabor frames.**

*In:* Monatshefte für Mathematik. Bd. 172 (November 2013) Heft 2. - S. 179-187.

ISSN 0026-9255

10.1007/s00605-013-0556-4

(Peer-Review-Journal)

- Pfander, Götz E. ; Rauhut, Holger ; Tropp, Joel:

### **The restricted isometry property for time-frequency structured random matrices.**

*In:* Probability theory and related fields. Bd. 156 (August 2013) Heft 3-4. - S. 707-737.

ISSN 0178-8051

10.1007/s00440-012-0441-4

(Peer-Review-Journal)

- Pfander, Götz E.:

### **Sampling of Operators.**

*In:* The journal of Fourier analysis and applications. Bd. 19 (Juni 2013) Heft 3. - S. 612-650.

ISSN 1069-5869 ; 1531-5851

10.1007/s00041-013-9269-2

(Peer-Review-Journal)

- Molahajloo, Shahla ; Pfander, Götz E.:

### **Boundedness of pseudo-differential operators on $L^p$ , Sobolev, and modulation spaces.**



*In: Mathematical modelling of natural phenomena : MMNP. Bd. 8 (2013) Heft 1. - S. 175-192.*  
ISSN 0973-5348  
<https://doi.org/10.1051/mmnp/20138113>  
(Peer-Review-Journal)

- Grip, Niklas ; Pfander, Götz E. ; Rashkov, Peter:

**[A time-frequency density criterion for operator identification.](#)**

*In: Sampling theory in signal and image processing : an international journal. Bd. 12 (2013) Heft 1. - S. 1-19.*  
ISSN 1530-6429  
arXiv:1504.05730  
(Peer-Review-Journal)



- Pfander, Götz E.:

**[Gabor frames in finite dimensions.](#)**

*In: Casazza Peter K. ; Kutyniok Gitta (Hrsg): Finite Frames. - Boston : Birkhäuser, 2013. - S. 193-239. - (Applied and Numerical Harmonic Analysis)*  
ISBN 978-0-8176-8372-6 ; 978-0-8176-8373-3 ; 0-8176-8372-0  
[https://doi.org/10.1007/978-0-8176-8373-3\\_6](https://doi.org/10.1007/978-0-8176-8373-3_6)  
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- Pfander, Götz E. ; Walnut, David:

**[Sparse finite Gabor frames for operator sampling.](#)**

*In: Proceedings of the International Conference on Sampling Theory and Applications (SampTA), July 1 - 5, 2013, Bremen. - Bremen : Eurasip, 2013. - S. 37-40*  
(Begutachteter Beitrag / peer-reviewed paper)

