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## Publications

### 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/SAMPTA.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  
ISBN 978-1-4673-7353-1 ; 1-4673-7353-2 ; 978-1-4673-7353-1

<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)

(Begutachteter Beitrag / peer-reviewed paper)

- 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)