

ISSN 1673-3452

Volume 12 · Number 4 · August 2017



QK1716931

Available  
online

[www.springerlink.com](http://www.springerlink.com)

# Frontiers of Mathematics in China



Higher Education Press

万方数据



Springer

Volume 12  
Number 4  
2017

Frontiers of  
**Mathematics**  
in China

### Research articles

- 769 **Jianjun CHEN, Xiaofeng WANG, Jin XIA, Guangfu CAO**  
Riccati equations and Toeplitz-Berezin type symbols on Dirichlet  
space of unit ball
- 787 **Jinjing CHEN, Zhengxin CHEN**  
A class of simple Lie algebras attached to unit forms
- 805 **Lei CHEN, Shaochen WANG**  
Asymptotic behavior for log-determinants of several non-Hermitian  
random matrices
- 821 **Hongshuai DAI, Guangjun SHEN, Lingtao KONG**  
Limit theorems for functionals of Gaussian vectors
- 843 **Huabin GE, Shiguang MA**  
Discrete  $\alpha$ -Yamabe flow in 3-dimension
- 859 **Xi GENG, Zhongmin QIAN**  
Finite dimensional characteristic functions of Brownian rough path
- 879 **Jiuhua GUO, Fayou ZHAO**  
Some  $q$ -inequalities for Hausdorff operators
- 891 **Jun HU, Jing ZHANG, Yabo WU**  
Involutions in Weyl group of type  $F_4$
- 907 **Ruo LI, Tiao LU, Zhangpeng SUN**  
Parity-decomposition and moment analysis for stationary Wigner  
equation with inflow boundary conditions

*(contents continued on inside back cover)*

中国数学前沿  
CN 11-5739/O1  
邮发代号: 80-964

ISSN 1673-3452



*(contents continued from outside back cover)*

- 921 **Yingbin MA, Lily CHEN, Hengzhe LI**  
Graphs with small total rainbow connection number
- 937 **Hongjie SONG, Changqing XU**  
Neighbor sum distinguishing total chromatic number of  $K_4$ -minor free graph
- 949 **Xiaomin TANG, Lijuan LIU, Jinli XU**  
Lie bialgebra structures on derivation Lie algebra over quantum tori
- 967 **Shaozhen XU, Dunyan YAN**  
A restriction theorem for oscillatory integral operator with certain polynomial phase
- 981 **Zhishan YANG**  
Ideal counting function in cubic fields
- 993 **Hui ZHANG, Chunyan QI, Baode LI**  
Anisotropic weak Hardy spaces of Musielak-Orlicz type and their Applications

Volume 12  
Number 4  
2017

Frontiers of  
**Mathematics**  
in China

### Research articles

- 769 **Jianjun CHEN, Xiaofeng WANG, Jin XIA, Guangfu CAO**  
Riccati equations and Toeplitz-Berezin type symbols on Dirichlet  
space of unit ball
- 787 **Jinjing CHEN, Zhengxin CHEN**  
A class of simple Lie algebras attached to unit forms
- 805 **Lei CHEN, Shaochen WANG**  
Asymptotic behavior for log-determinants of several non-Hermitian  
random matrices
- 821 **Hongshuai DAI, Guangjun SHEN, Lingtao KONG**  
Limit theorems for functionals of Gaussian vectors
- 843 **Huabin GE, Shiguang MA**  
Discrete  $\alpha$ -Yamabe flow in 3-dimension
- 859 **Xi GENG, Zhongmin QIAN**  
Finite dimensional characteristic functions of Brownian rough path
- 879 **Jiuhua GUO, Fayou ZHAO**  
Some  $q$ -inequalities for Hausdorff operators
- 891 **Jun HU, Jing ZHANG, Yabo WU**  
Involutions in Weyl group of type  $F_4$
- 907 **Ruo LI, Tiao LU, Zhangpeng SUN**  
Parity-decomposition and moment analysis for stationary Wigner  
equation with inflow boundary conditions

*(contents continued on inside back cover)*

中国数学前沿  
CN 11-5739/O1  
邮发代号: 80-964

ISSN 1673-3452

