Nagoya Mathematical Journal is included in the Cambridge Journals Online service which can be found at http://journals.cambridge.org/. For further information on other Press titles access cambridge.org/.

Subscriptions: Nagoya Mathematical Journal (ISSN 0027-7630) is published in four parts or volumes in 2020, in March, June, September and December. The Journal is published by Cambridge University Press, Journals Fulfillment Department, UPH, Shaftesbury Road, Cambridge CB2 8BS, UK. /Cambridge University Press, 1 Liberty Plaza, Floor 20, New York, NY 10006, USA on behalf of the Editorial Board of the Nagoya Mathematical Journal. Subscriptions include four volumes; all subscriptions are on a calendar-year basis. Annual subscription rates (excluding VAT) in 2020 are: print and electronic, \$523; print-only, \$499; electronic-only, \$414.

Orders, which must be accompanied by payment, should be sent to any bookseller or subscription agent, or direct to the publisher: Cambridge University Press, Shaftesbury Road, Cambridge CB2 8RU. Subscriptions in the USA, Canada and Mexico should be sent to Cambridge University Press, Journals Fulfillment Department, 1 Liberty Plaza, Floor 20, New York, NY 10006, USA. EU subscribers (outside the UK) who are not registered for VAT should add VAT at their country's rate. VAT registered subscribers should provide their VAT registration number. Japanese prices for institutions are available from Kinokuniya Company Ltd, P.O. Box 55, Chitose, Tokyo 156, Japan. Prices include delivery by air.

Copying: This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, Mass. 01923, USA. Organizations in the USA who are also registered with C.C.C. may therefore copy material (beyond the limits permitted by sections 107 and 108 of US copyright law) subject to payment to C.C.C. of the per-copy fee of \$45.00. This consent does not extend to multiple copying for promotional or commercial purposes.

Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions.

For all other use, permission should be sought from Cambridge or the American Branch of Cambridge University Press.

**Advertising**: Details on advertising in *Nagoya Mathematical Journal* may be obtained directly from the Publisher.

Indexing/Abstracting: Nagoya Mathematica Journal is indexed and/or abstracted in Current Contents. Physical, Chemical, and Earth Sciences, MathSciNet, Science Citation Index, Science Citation Index Expanded, and Zentralblatt MATH.

© 2020 Foundation Nagoya Mathematical Journal

Printed in Great Britain by Bell & Bain Ltd, Glasgow.

This journal issue has been printed on FSC<sup>TM</sup>-certified paper and cover board. FSC is an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests. Please see www.fsc.org for information.

## CONTENTS

Hahn, J.	
On canonical bases and induction of $W$ -graphs	1
Fujino, O. and Sato, H.  Notes on toric varieties from Mori theoretic viewpoint, II	42
Das, O. Finiteness of log minimal models and nef curves on 3-folds in characteristic $p > 5$	76
Oguiso, K.  No cohomologically trivial nontrivial automorphism of generalized  Kummer manifolds	110
Li, Z. and Xue, Q. On the bilinear square Fourier multiplier operators associated with $g_{\lambda}^*$ function	123
Hosono, G.  The optimal jet $L^2$ extension of Ohsawa–Takegoshi type	153
Andrews, G. E., Berndt, B. C., Chan, S. H., Kim, S. and Malik, A.	
Four identities for third order mock theta functions	173
Hamdi, T.  Liberation, free mutual information and orbital free entropy	205
Dixit, A., Gupta, R., Kumar, R. and Maji, B. Generalized Lambert series, Raabe's cosine transform and a generalization of Ramanujan's formula for $\zeta(2m+1)$	232
Burns, D.  On the Galois structure of arithmetic cohomology I: compactly supported p-adic cohomology	294
Polstra, T. and Smirnov, I.  Continuity of Hilbert–Kunz multiplicity and F-signature	322
Dutta, A. K., Gupta, N. and Lahiri, A. On separable $\mathbb{A}^2$ and $\mathbb{A}^3$ -forms	346

## Cambridge Core

For further information about this journal please go to the journal web site at **cambridge.org/nmj** 



MIX
Paper from
responsible sources
FSC® C007785

