



THE UNIVERSITY OF
MELBOURNE

CAUL Achievement Award, 2016

Stephen Cramond
Manager, Institutional Repository
University of Melbourne
17 March 2016



- Royal Society of Chemistry
- Springer
- Others



- Nearly 50% of UoM papers available as Gold OA
- High proportion are ARC/NHMRC funded papers
- Working with RSC to simplify workflows for library and author



- Springer agreement
 - All UoM-authored AAMs, 2012-16
 - 100% coverage
 - Why?
 - How?
 - Costs?



Green OA in Australia

Year	NHMRC Records in Austn IRs	NHMRC Records at Web of Science	% Coverage in Aust IRs	ARC Records in Aust IRs	ARC Records at Web of Science	% Coverage in Aust IRs
2016	237	1,005	24%	448	1,808	25%
2015	1,425	6,882	21%	2,985	11,825	25%
2014	1,721	6,439	27%	2,317	10,342	22%
2013	1,686	6,254	27%	1,685	9,619	18%



- **ResearchGate**
- [Academia.edu](https://www.academia.edu/)
- Mendeley

Articles

[PDF] Risk factors and burden of osteoarthritis**[PDF] from researchgate.net**

C mence Palazzo, C Nguyen, MM Lefevre-Colau... - 2016 - researchgate.net

... Ann Phys Rehabil Med (2016), http:// dx.doi.org/10.1016/j.rehab.2016.01.006 Available online at **ScienceDirect** www.sciencedirect.com http://dx.doi.org/10.1016/j.rehab.2016.01.006

1877-0657/© 2016 Elsevier Masson SAS. All rights reserved. Page 2. ...

Cite Save More

Any time

Since 2016

Since 2015

Since 2012

Custom range...

[PDF] Computational analysis of IR-SOFC: Thermodynamic, electrochemical process and flow configuration dependency**[PDF] from researchgate.net**
SourceIt@Melbourne

S Tushar Choudhary - international journal of hydrogen energy, 2016 - researchgate.net

... E-mail addresses: tusharchoudhary311@gmail.com (T. Choudhary), sanjay.me@nitjsr.ac.in (Sanjay). Available online at www.sciencedirect.com **ScienceDirect** journal homepage:www.elsevier.com/locate/ijhe international journal of hydrogen energy **41** (2016) 1259 e1271 ...

Cite Save More

Sort by relevance

Sort by date

 include patents include citations Create alert**[PDF] Evaluation of acute ischemia in pre-procedure ECG predicts myocardial salvage after primary PCI in STEMI patients with symptoms N12 hours☆****[PDF] from researchgate.net**

SD Kristensen, GS Wagner, M Sejersten... - 2016 - researchgate.net

... However, the progression of myocardial necrosis has great inter-individual variation and depends on Available online at www.sciencedirect.com **ScienceDirect** Journal of Electrocardiology xx (2016) xxx – xxx www.jecgonline.com ☆ Disclosures: None. ...

Cite Save More

[PDF] Ethical approval**[PDF] from researchgate.net**

GS Campos - Infect Dis, 2016 - researchgate.net

... Infectious Diseases Department, Clínica de Marly, Bogotá, Colombia * Corresponding author. E-mail address: afaccini@gmail.com (Á.A. Faccini-Martínez) 7 January 2016

Available online at www.sciencedirect.com **ScienceDirect**

Cite Save More

[PDF] Col Jyotindu Debnath*, Brig R. Ravikumar b, Brig Vivek Sharma c, Maj KPS Senger d, Col Vinay Maurya e, Col Giriraj Singh f, Col Pankaj Sharma e, Lt Col A. ...**[PDF] from researchgate.net**
SourceIt@Melbourne

A Singh - medical journal armed forces india, 2016 - researchgate.net

... Corresponding author. Tel.: **+91 20 26330825**; mobile: **+91 7875900034**. E-mail address: jyotindu_debnath@rediffmail.com (J. Debnath). Available online at www.sciencedirect.com**ScienceDirect** journal homepage: www.elsevier.com/locate/mjafi ...

Cite Save More

ARTICLE IN PRESS

Available online at www.elsevier.com

MEDICAL JOURNAL ARMED FORCES INDIA 72 (2016) 33-37

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/mjafi



Original Article

'Empty sella' on routine MRI studies: An incidental finding or otherwise?

Col Jyotindu Debnath^{a,*}, Brig R. Ravikumar^b, Brig Vivek Sharma^c, Maj K.P.S. Senger^d, Col Vinay Maurya^e, Col Giriraj Singh^f, Col Pankaj Sharma^e, Lt Col A. Khera^g, Ankita Singh^h

^a Professor, Department of Radiodiagnosis, Armed Forces Medical College, Pune 411040, India

^b Professor & Head, Department of Radiodiagnosis, Armed Forces Medical College, Pune 40, India

^c Commandant, 155 Base Hospital, C/O 99 APO, India

^d Resident, Department of Radiodiagnosis, Armed Forces Medical College, Pune 40, India

^e Associate Professor, Department of Radiodiagnosis, Armed Forces Medical College, Pune 40, India

^f Senior Adviser (Radiology), Command Hospital (Southern Command), Pune 40, India

^g Assistant Professor, Department of Community Medicine, Armed Forces Medical College, Pune 40, India

^h Former Research Associate, Intra Health International, BMGF Funded Project, India

ELSEVIER
Update
Risk
Clém
Franç
Service de
Inserm, h
ARTIC
Article has
Received
Accepted
Keywords
Epidemi
Osteoart
Risk fact
Mortality
Disability
Prevalen
Burden
Mechanical
ARTIC
Article histo
Received 1
Received in
20 October
Accepted 2
Available c

ELSEVIER
Evaluat
salvage
Yama
Steen

^f Departme
^g Unive
Abstract



- RG – single largest source of OA fulltext downloads in Google Scholar
- RG – accounts for >70% of illegal papers made publicly available
- No attempt made to ensure compliance



- CHORUS and CHOR-AUS?



Title **Two-band description of resonant superfluidity in atomic Fermi gases**

Author(s) [He, Lianyi](#); [Hu, Hui](#); [Liu, Xia-Ji](#)

Abstract Fermionic superfluidity in atomic Fermi gases across a Feshbach resonance is normally described by the atom-molecule theory, which treats the closed channel as a noninteracting point boson. In this work we present a theoretical description of the resonant superfluidity in analogy to the two-band superconductors. We employ the underlying two-channel scattering model of Feshbach resonance where the closed channel is treated as a composite boson with binding energy $\epsilon < 0$ and the resonance is triggered by the microscopic interchannel coupling $U > 12$. The binding energy $\epsilon < 0$ naturally serves as an energy scale of the system, which has been sent to infinity in the atom-molecule theory. We show that the atom-molecule theory can be viewed as a leading-order low-energy effective theory of the underlying fermionic theory in the limit $\epsilon < 0 \rightarrow -\infty$ and $U > 12 \rightarrow 0$, while keeping the phenomenological atom-molecule coupling finite. The resulting two-band description of the superfluid state is in analogy to the BCS theory of two-band superconductors. In the dilute limit $\epsilon < 0 \rightarrow -\infty$, the two-band description recovers precisely the atom-molecule theory. The two-band theory provides a natural approach to study the corrections because of a finite binding energy $\epsilon < 0$ in realistic experimental systems. For broad and moderate resonances, the correction is not important for current experimental densities. However, for extremely narrow resonance, we find that the correction becomes significant. The finite binding energy correction could be important for the stability of homogeneous polarized superfluid against phase separation in imbalanced Fermi gases across a narrow Feshbach resonance.

Publication type Journal article

Research centre [Swinburne University of Technology. Faculty of Science, Engineering and Technology. Centre for Quantum and Optical Science](#)

Source Physical Review A, Vol. 91, (Feb 2015), article no. 023622

Publication year [2015](#)

Publisher [American Physical Society](#)

ISSN 1050-2947

Publisher URL <http://doi.org/10.1103/PhysRevA.91.023622>

Copyright Copyright © 2015 American Physical Society.

Research Projects <http://purl.org/au-research/grants/ARC/FT140100003>
<http://purl.org/au-research/grants/ARC/FT130100815>

Two-band description of resonant superfluidity in atomic Fermi gases

Lianyi He, Hui Hu, and Xia-Ji Liu
Phys. Rev. A **91**, 023622 – Published 23 February 2015



Article PDF HTML Export Citation

ABSTRACT

Fermionic superfluidity in atomic Fermi gases across a Feshbach resonance is normally described by the atom-molecule theory, which treats the closed channel as a noninteracting point boson. In this work we present a theoretical description of the resonant superfluidity in analogy to the two-band superconductors. We employ the underlying two-channel scattering model of Feshbach resonance where the closed channel is treated as a composite boson with binding energy ϵ_0 and the resonance is triggered by the microscopic interchannel coupling U_{12} . The binding energy ϵ_0 naturally serves as an energy scale of the system, which has been sent to infinity in the atom-molecule theory. We show that the atom-molecule theory can be viewed as a leading-order low-energy effective theory of the underlying fermionic theory in the limit $\epsilon_0 \rightarrow \infty$ and $U_{12} \rightarrow 0$, while keeping the phenomenological atom-molecule coupling finite. The resulting two-band description of the superfluid state is in analogy to the BCS theory of two-band superconductors. In the dilute limit $\epsilon_0 \rightarrow \infty$, the two-band description recovers precisely the atom-molecule theory. The two-band theory provides a natural approach to study the corrections because of a finite binding energy ϵ_0 in realistic experimental systems. For broad and moderate resonances, the correction is not important for current experimental densities. However, for extremely narrow resonance, we find that the correction becomes significant. The finite binding energy correction could be important for the stability of homogeneous polarized superfluid against phase separation in imbalanced Fermi gases across a narrow Feshbach resonance.

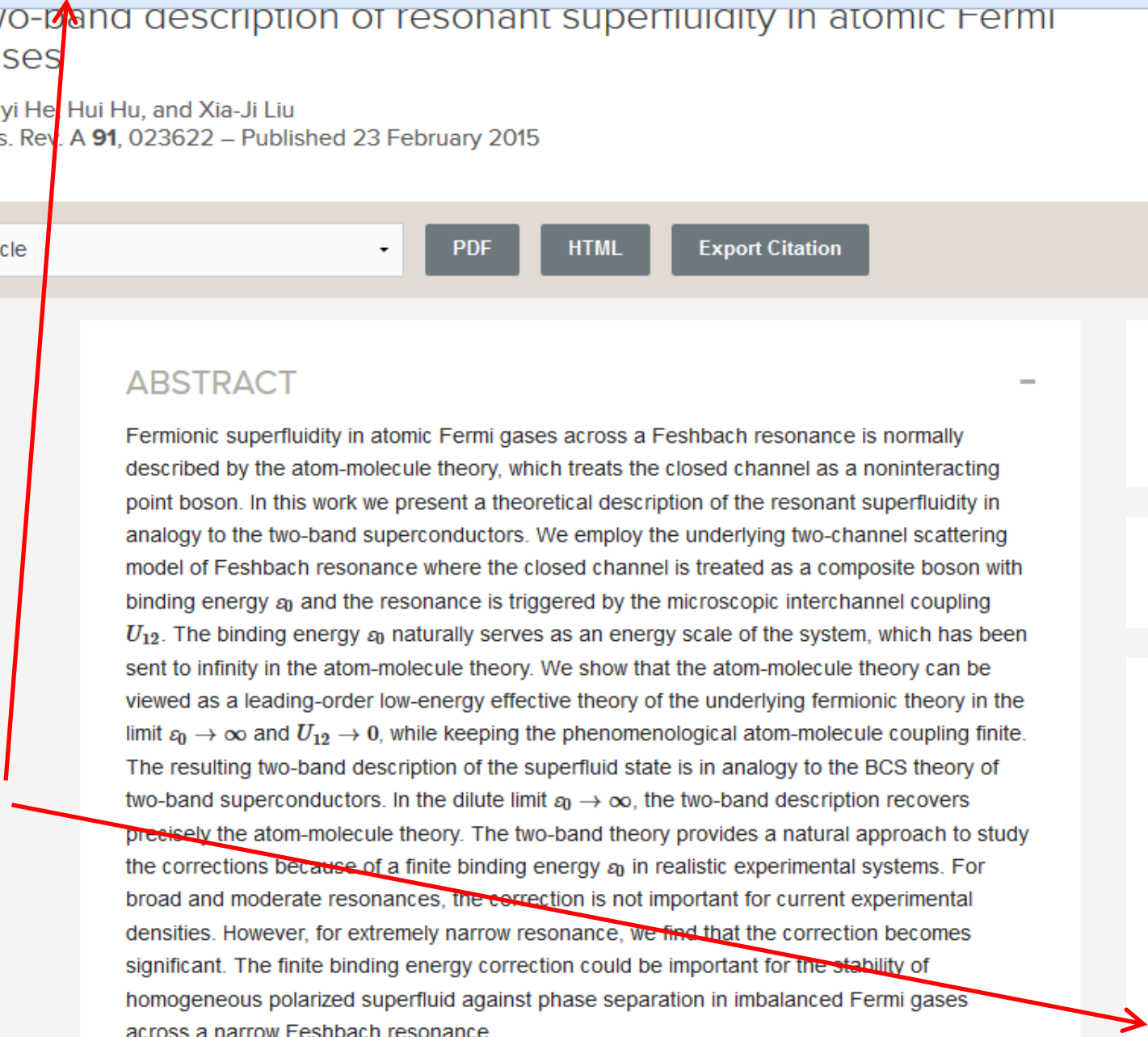
Issue
Vol. 91, Iss. 2 — February 2015

[Reuse & Permissions](#)

Access Options
[Buy Article »](#)
[Get access through a U.S. public or high school library »](#)
[Log in with a username/password provided by your institution »](#)

 Article Available via CHORUS

[Download Accepted Manuscript](#)





CHORUS

This is the accepted manuscript made available via CHORUS. The article has been published as:

Two-band description of resonant superfluidity in atomic Fermi gases

Lianyi He, Hui Hu, and Xia-Ji Liu

Phys. Rev. A **91**, 023622 — Published 23 February 2015

DOI: [10.1103/PhysRevA.91.023622](https://doi.org/10.1103/PhysRevA.91.023622)



1 CITATION

30 REFERENCES

SEE PUBLICATION STATS

Two-band description of resonant superfluidity in atomic Fermi gases



ARTICLE in PHYSICAL REVIEW A 91(02):023622 · FEBRUARY 2015 with 18 READS

Impact Factor: 2.81 · DOI: 10.1103/PhysRevA.91.023622 · Source: arXiv



- Gold OA
 - SCOAP3, Springer Compact, Flipped Business Models
- Green OA
 - Funders, institutions want 100% compliance - how best to get there? *Publisher participation seems to offer the quickest, least problematic route.*
 - Funders, institutions want unambiguous, liberal licence regime for AAMs. *Publishers are offering CTA conditions.*
 - Funders, institutions want short, uniform embargo periods. *Publishers want longer, variable periods.*
 - Funders want to use OA repositories to service public access. *[Big] publishers want to use publisher platforms.*
 - Publishers, Institutions share[?] concern over SCNs - *explore as basis for beter approach to Green OA*