

Publication notification

QUAST

including metadata (please try to fill in as much as possible, even if not complete)

Publicati	ion:				
Title:	Understanding the microscopic origin of the magnetic interactions in CoNb2O6				
Journal Reference (URL or DOI):		https://doi.org/10.1038/s41535-024-00715-6			
arXiv Reference:		https://arxiv.org/abs/2406.17854			
	_				
Contact	for data requ	ests:			
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Academic position / Role in data stor		storage:	PhD Student		
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Academic position / Role in data storage:		storage:	Postdoctoral researcher		
Type of o	data produce	d: (Please check th	ne corresponding box)		
QUAST-funded a	uthors were not directly involve	d in creating or storing	g data.		
Work is purely a	nalytic. Figures are visualizations	s of analytic expressio	ns given in the paper.		
For original data	, please refer to the cited publica	tions.			
All data and code shown in the paper are available in [provide link]					
X Data is available	on reasonable request [fill out the	he missing information	n below]		
Other [please pro	ovide an alternative description l	pelow]			

$Dataset \ 1: \ {\tt (Collection \ of \ data \ published/archived \ together)}$

Short description of data:	Series of magnetic exchange couplings for CoNb2O6 for various initial conditions/ microscopic parameters. Microscopic input, e.g. hopping parameters were obtained from DFT (FPLO)
Origin of data (institution):	Goethe Universität Frankfurt, FB 13, ITP, AG Valenti
(3rd party) Software used:	FPLO
additional information in	cluded as README with data
Data availabi	llity:
published at (DOI)	
X on reasonable reques	t, to corresponding author. Data is archived
according to local	policy at institution (as provided).
other (Please prov	vide details: location, accessible by,)
X data included in p	publication or as supplemental online material at the publishers website
Source availa	bility: (own software or scripts, used to generate/process data)
published at (link)	
archived/published w	ith data archived according to local policy at institution (as provided)
X other (Please provide	details: location, accessible by,)
On reasonable re	equest, to corresponding author: Amanda Anna Konieczna

Dataset 2: (Collection of data published/archived together)

	INS and THz data from exchange couplings, obtained through exact diagonalization		
Short description of data:			
Origin of data (institution):	Goethe Universität Frankfurt, FB 13, ITP, AG Valenti		
(3rd party) Software used:			
additional information in	ncluded as README with data		
Data availabi	ility:		
X published at (DOI)	ТВА		
on reasonable reques	t, to corresponding author. Data is archived:		
according to local	policy at institution (as provided).		
other (Please prov	vide details: location, accessible by,)		
☐ data included in r	publication or as supplemental online material at the publishers website		
Source availa	ability: (own software or scripts, used to generate/process data)		
published at (link)			
archived/published w	vith data archived according to local policy at institution (as provided)		
X other (Please provide	details: location, accessible by,)		
On reasonable re	On reasonable request, to corresponding author: David A. S. Kaib		