

## **Biographical Sketch of Richard J. Creswick**

### **Professional Preparation**

Colorado College	Physics	BA 1974
University of California, Berkeley	Physics	PhD 1981

### **Academic appointments**

Professor USC, 1999-Present; Associate Professor USC, 1990-1999; Assistant Professor USC, 1987-1990, NSF Postdoctoral Fellow, USC, 1985-1987; Visiting Professor, USC 1984-1985; Associate Professor, Morris College 1983-1984. F.O.M. (Netherlands) Post-Doctoral Fellow, 1981-1983

### **Other Professional Appointments**

Research Associate. Lawrence Berkeley Laboratory, 1979-1981

### **Recent Publications**

“First Results from CUORE: A Search for Lepton Number Violation via Decay of Te-130,” C. Alduino et al., Phys. Rev. Lett., **120**, 132501 (2018)

“Search for neutrinoless EC decay of  $^{120}\text{Te}$  with CUORE-0,” C. Alduino et al., Physical Review C **97**, 055502 (2018)

“Study of Rare Nuclear Processes with CUORE”

The CUORE Collaboration, Intl. Jnl. Mod. Phys. **33** 1843002 (2018)

“Search for Neutrinoless  $\beta^+$  EC Decay of Te-120 with Cuore-0”

The CUORE Collaboration, Phys. Rev. C **97** 055502 (2018)

“CUORE and CUORE-0 Experiments”, the CUORE Collaboration  
Nuovo Cimento C **40** 60, (2017)

“Estimating the Flux of 14.4 keV Solar Axions, F.T. Avignone III, R.J. Creswick, J.D. Vergados, P. Pirinen, P.C. Srivastave, and J. Suhonen, JCAP01 021 (2018)

The Projected Background for the CUORE Experiment”, The CUORE Collaboration,  
Euro. Phys. Jnl. C **77** 543, (2017)

“Low-Energy Analysis Techniques for CUORE”, The CUORE Collaboration, Euro. Phys. Jnl. C **77** 857 (2017)

“Sensitivity of the CUORE detector to 14.4 keV solar axions emitted by the M1 nuclear transition of Fe-57” Dawei Li, Richard J. Creswick, Frank T. Avignone III, Yuanxu Wang JCAP **02** 031, (2016)

“Theoretical estimate of the sensitivity of the CUORE detector to solar axions”  
Dawei Li, R.J. Creswick, F.T. Avignone III, and Yuanxu Wang  
JCAP **10** 0656 (2015)

## Graduate Students Supervised

Cynthia Sisson	PhD	1993	"Decoupled Cell Monte Carlo: Theory and Convergence Studies of a New Method for Quantum Simulations" <i>Professor Emeritua LSU Shreveport</i>
Thomas Turpin	MS	1993	"Entropic Interaction of Vacancies in a Spin Background" <i>Software Engineer, Dept. Corrections</i>
Andrey Pavel'yev	PhD	1997	"Numerical Calculation of the Restricted Density of States for the Three Dimensional Ising Model" <i>Mathematical Modelling, Merck</i>
William Baird	PhD	1999	"Numerical Evaluation of the Feynman Path Integral" <i>Professor, Dept. Physics, Ga. State U.</i>
Seung-Yeon Kim	PhD	2000	"Exact Results for the Partition Function of the Q-State Potts Model" <i>Professor of Physics, Chungiu Nat'l U., Korea</i>
Aleyna Parfenova	PMS	2003	PMD
Rodney Topp	PMS	2003	PMD <i>Test Engineer Ansaldo STS USA</i>
Parker Page	PMS	2004	PMD
Jennifer Norman	PMS	2005	PMD
Aki Sakamoto	PMS	2006	PMD
Jeff Baker	PMS	2006	PMD
Ryan Hudson	PMS	2007	PMD <i>President ASAP Heatng and Air, Columbia, SC</i>
Baowie Liu	PhD	2010	"Charge Echo in an Electron Gas" <i>Computational Scientist, Dept. Physics and Astronomy, University of Rochester</i>
Dawei Li	PhD	2016	"Coherent Scattering of Solar Axions" <i>Software Engineer, SIOS Technology Corp</i>