

## CURRICULUM VITAE

### JEFFREY R. WILSON, Associate Professor

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### EDUCATION

Michigan State University	Physics	B.S.	1979
Purdue University	Physics	Ph.D.	1985

### PROFESSIONAL EMPLOYMENT

1995 - present Associate Professor, Dept. of Physics and Astronomy, USC  
1990 - 1995 Assistant Professor, Dept. of Physics and Astronomy, USC  
1988 - 1990 Visiting Research Assistant Professor, University of Illinois  
1985 - 1988 Postdoctoral Research Associate, University of Illinois

### PROFESSIONAL AFFILIATIONS

American Physical Society (DPF, Forum on Education)  
Sigma Xi  
Fermilab Users Organization  
SLAC Users Organization  
FOCUS Collaboration  
BaBar Collaboration

### SELECTED PUBLICATIONS (FROM LAST THREE YEARS)

#### **A Structure at 2175-MeV in $e^+ e^- \rightarrow \phi f_0(980)$ Observed via Initial-State Radiation.**

By BABAR Collaboration ([B. Aubert et al.](#)). SLAC-PUB-12146, BABAR-PUB-06-1482, Oct 2006. 8pp.  
Published in **Phys.Rev.D74:091103,2006**.  
e-Print Archive: **hep-ex/0610018**

#### **Measurement of the absolute branching fractions $B \rightarrow D\pi$ , $D^*\pi$ , $D^{**}\pi$ with a missing mass method.**

By BABAR Collaboration ([B. Aubert et al.](#)). SLAC-PUB-12107, BABAR-PUB-06-057, PHYS.REV.D, Sep 2006. 8pp.  
Contributed to 33rd International Conference on High Energy Physics (ICHEP 06), Moscow, Russia, 26 Jul - 2 Aug 2006.  
Published in **Phys.Rev.D74:111102,2006**.  
e-Print Archive: **hep-ex/0609033**

#### **Observation of $B^+ \rightarrow \phi \phi K^+$ and evidence for $B^0 \rightarrow \phi \phi K^0$ below $\eta(c)$ threshold.**

By BABAR Collaboration ([B. Aubert et al.](#)). SLAC-PUB-12113, BABAR-PUB-06-042, Sep 2006. 7pp.  
Presented at 33rd International Conference on High Energy Physics (ICHEP 06), Moscow, Russia, 26 Jul - 2 Aug 2006.

Published in **Phys.Rev.Lett.97:261803,2006.**  
e-Print Archive: **hep-ex/0609027**

**Observation of an excited charm baryon  $\Omega(C)^*$  decaying to  $\Omega(C)0$  gamma.**

By BABAR Collaboration ([B. Aubert et al.](#)). SLAC-PUB-12075, BABAR-PUB-06-055, Aug 2006. 7pp.  
Presented at 33rd International Conference on High Energy Physics (ICHEP 06), Moscow, Russia, 26 Jul - 2 Aug 2006.

Published in **Phys.Rev.Lett.97:232001,2006.**  
e-Print Archive: **hep-ex/0608055**

[Plus 63 more BaBar publications in 2006.]

B. Aubert et al., "SEARCH FOR THE W-EXCHANGE DECAYS  $B_0 \rightarrow D(S)^* - D(S)^* +$ ."  
Published in Phys. Rev. D72:111101, 2005. [HEP-EX 0510051]

B. Aubert et al., "MEASUREMENT OF THE BRANCHING RATIOS  
 $\Gamma(D(S)^* \rightarrow D(S) + \pi^0) / \Gamma(D(S)^* \rightarrow D(S) + \gamma)$  AND  
 $\Gamma(D^* \rightarrow D + \pi^0) / \Gamma(D^* \rightarrow D + \gamma)$ ."  
Published in Phys. Rev. D72:091101, 2005. [HEP-EX 0508039]

B. Aubert et al., "SEARCH FOR DECAYS OF  $B_0 \rightarrow e^+ e^-$ ,  
 $B_0 \rightarrow \mu^+ \mu^-$ ,  $B_0 \rightarrow e^+ \mu^-$ ."  
Published in Phys. Rev. Lett.94:221803, 2005.

B. Aubert et al., "MEASUREMENTS OF THE  $B \rightarrow X(S \text{ GAMMA})$  BRANCHING FRACTION AND PHOTON SPECTRUM FROM A SUM OF EXCLUSIVE FINAL STATES."  
Published in Phys. Rev. D72:052004, 2005. [HEP-EX 0508004]

[Plus 56 more BaBar publication in 2005.]

J.M. Link et al., SEARCH FOR  $\Lambda^+(C) \rightarrow p K^+ \pi^-$  AND  $D^+(S) \rightarrow K^+ K^+ \pi^-$  USING GENETIC PROGRAMMING EVENT SELECTION.  
Published in Phys.Lett.B624:166-172,2005. [HEP-EX 0507103]

J.M. Link et al., SEARCH FOR A STRONGLY DECAYING NEUTRAL CHARMED PENTAQUARK.  
Published in Phys.Lett.B622:229-238,2005. [HEP-EX 0506013]

J.M. Link et al., SEARCH FOR T VIOLATION IN CHARM MESON DECAYS.  
Published in Phys.Lett.B622:239-248,2005. [HEP-EX 0506012]

J.M. Link et al., STUDY OF  $\Lambda^+(C)$  CABIBBO FAVORED DECAYS CONTAINING A LAMBDA BARYON IN THE FINAL STATE.  
Published in Phys.Lett.B624:22-30,2005.[HEP-EX 0505077]

[Plus 13 more FOCUS publications in 2005]

J.M. Link, et al., “Study Of The Doubly And Singly Cabibbo Suppressed Decays  $D^+ \rightarrow K^+ \pi^+ \pi^-$  AND  $D^+(S) \rightarrow K^+ \pi^+ \pi^-$ .” Phys.Lett.B601:10-19,2004.  
 J.M. Link, et al., “Measurement Of The Ratio Of The Vector To Pseudoscalar Charm Semileptonic Decay Rate  $\Gamma(D^+ \rightarrow \text{ANTI-}K^0 \mu^+ \nu) / \Gamma(D^+ \rightarrow \text{ANTI-}K^0 \mu^+ \nu)$ .” Phys.Lett.B598:33-41,2004  
 J.M. Link, et al., “Measurements Of Six Body Hadronic Decays Of The  $D_0$  Charmed Meson.” Phys.Lett.B586:21-26,2004 e-Print Archive: hep-ex/0401019  
 [Plus 5 more FOCUS publications in 2004]

“Study Of  $E^+ E^- \rightarrow \pi^+ \pi^- \pi^0$  Process Using Initial State Radiation With BABAR.”  
 By BABAR Collaboration ([B. Aubert et al.](#)). SLAC-PUB-10624, BABAR-PUB-04-034, Aug 2004. 21pp. Phys.Rev.D70:072004,2004 e-Print Archive: hep-ex/0408078  
 “Study Of  $B \rightarrow D(SJ)^+ \text{ANTI-}D^+ \text{ Decays}$ .” By BABAR Collaboration ([B. Aubert et al.](#)). SLAC-PUB-10627, BABAR-PUB-04-24, Aug 2004. 7pp. Phys.Rev.Lett.93:181801,2004 e-Print Archive: hep-ex/0408041  
 “Search For Flavor-Changing Neutral Current And Lepton-Flavor Violating Decays Of  $D_0 \rightarrow L^+ L^-$ .”  
 By BABAR Collaboration ([B. Aubert et al.](#)). SLAC-PUB-10594, BABAR-PUB-04-027, Aug 2004. 7pp. Phys.Rev.Lett.93:191801,2004 e-Print Archive: hep-ex/0408023  
 “Search For The Decay  $B_0 \rightarrow J / \psi \text{ GAMMA}$ .” By BABAR Collaboration ([B. Aubert et al.](#)). SLAC-PUB-10585, Aug 2004. 7pp. Phys.Rev.D70:091104,2004 e-Print Archive: hep-ex/0408018

[ Plus 6 more BaBar publications in 2004.]

## EDUCATION RELATED ACTIVITIES

1. Provided instruction for a Summer Institute in 2005 and 2006. The purpose of the Institute was to train Middle School Science teachers to use inquiry techniques in their teaching. They also learned how to rework their lessons to use a “phenomenon first” approach when presenting material.
2. Operated a “Physics Roadshow” for many years. This is primarily targeted toward Elementary and Middle School science classes. The Roadshow is highly interactive and covers State Science Standards for each grade level that participates.

## RECENT FUNDING HISTORY

Agency: DOE  
 Title: Experimental Particle Physics  
 PI(s): S.R. Mishra, M.V. Purohit, C. Rosenfeld, and J.R. Wilson  
 Project dates: 6/01/07-5/31/10

Amount requested: '07 \$593,000.00 (grant now in effect)

Agency: DOE  
 Title: Experimental Particle Physics  
 PI(s): S.R. Mishra, M.V. Purohit, C. Rosenfeld, and J.R. Wilson  
 Project dates: 2/18/95-5/31/07

Amount awarded: '03 \$580,000.00  
 '04 \$565,000.00  
 '05 \$554,000.00 (revised)  
 '06 \$580,000.00 (revised)