deconstruction: author list

Physical Review Letters, which is published by the American Physical Society, is one of the most respected journals in physics. It publishes short research articles—"letters"—that are four pages long.

Like all large particle physics collaborations, the CDF collaboration presents its author list in alphabetical order. In this paper, **A. Abulencia** leads the list. Since then he was kicked from the number one spot by new CDF member T. Aaltonen.

R. Field worked as a postdoc for Nobel Prize winner Richard Feynman. But he's better known as the brother of actress Sally Field.

Experimental physicists often write their PhD theses on one experiment and then join another experiment. **S. Grinstein** is one of several CDF physicists who worked as a graduate student on the competing DZero collider experiment, on the opposite side of the Tevatron ring, before joining CDF.

Kim is the most frequent last name among CDF scientists, followed by Wagner, Martin and Yu. **Young-Kee Kim** became deputy director of Fermilab in 2006, and continues to be a member of the CDF collaboration.

Jacobo Konigsberg, of the University of Florida, and Rob Roser, Fermilab, are the current spokespersons for the CDF collaboration. Elected for two-year terms, they lead the collaboration in scientific matters and provide information to the public.

Nigel Lockyer has worked for more than 20 years on CDF. In 2006, he was named director of the TRIUMF laboratory in Canada. He still is an active member of CDF. **More than 600 scientists** work on the Collider Detector at Fermilab and are listed on this publication. They built the 6000-ton detector, operate the system and analyze the huge amount of data recorded. To fit the entire **CDF author list** into the article and still have space for scientific content, *PRL* editors have extended their usual page limit. This CDF publication is seven pages long; the first two and a half pages list all the collaboration members and their institutions.

W and *Z* particles are the mediators of the weak nuclear force. The production of either particle is a fairly rare event. At the Tevatron collider, *Ws* arise from one in three million collisions, and *Zs* from one in ten million. Only once in about 20 billion proton-antiproton collisions are both *W* and *Z* produced simultaneously. In this paper the CDF collaboration reports the first observation of these rare *WZ* events, after recording collisions for more than six years. The result is an important step toward finding the even more elusive Higgs particle.

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The Collider Detector at

Fermilab (CDF) is one of two experiments that record the debris of powerful proton-antiproton collisions at the Tevatron particle collider to explore subatomic processes. Analyzing the data, physicists gain a better understanding of the nature of the universe and what it is made of.

CDF submitted this paper to Physical Review Letters in February 2007. The paper was peer reviewed and approved for publication and appeared in the April 20, 2007, issue of PRL. The CDF collaboration had five papers in PRL in April 2007, with a total of 15 pages listing collaborating scientists and member institutions.

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Nine married couples are part of the CDF collaboration:

P. Azzi-Bacchetta and N. **Bacchetta:**

- S. Belforte and A. Zanetti;
- V. Boisvert and D. Waters:
- G. Bolla and P. Merkel:
- F. Canelli and B. Kilminster;
- J. Conway and R. Erbacher:
- S. Grinstein and V. Sorin;
- S. Levy and J. Thom;
- G. Manca and R. Oldeman.

E.E. Schmidt is the organizer of the Fermilab Dragon Boat Racing Crew.

V. Sorin, a postdoc at Michigan State University, is from Argentina. She is the sister of Argentine soccer star Juan Pablo Sorin.

B. Stelzer and O. Stelzer-Chilton work for different research institutions, but they have a lot in common: they are identical twins.

W. Trischuk is director of the Canadian Institute of Particle Physics.

The CDF collaboration

includes scientists from 61 institutions in 14 countries on three continents. The institutions are listed in alphabetical order, ignoring common words like "university" or "institute." Hence the Academia Sinica is the first and Yale University is the last institution on the list.

Text: J. Bryan Lowder Document: Physical Review Letters. The complete PDF is at http://prl.aps.org