

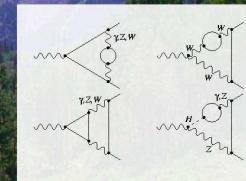
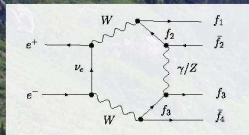
# Welcome to LoopFest IV

**August 18 - 19, 2005**

**LoopFest IV**

*Radiative Corrections for the International Linear Collider*

**Snowmass, Colorado**



**Organizers:**

*Ulrich Baur*

*Sally Dawson*

*Stefan Dittmaier*

*Doreen Wackeroth*

*Youichi Yamada*

<http://www.physics.buffalo.edu/loopfest4>

email: [dow@ubpheno.physics.buffalo.edu](mailto:dow@ubpheno.physics.buffalo.edu)

sponsored by ALCPG

# LoopFest History

**LoopFest**  
Brookhaven National  
Laboratory  
May 9 - 10, 2002

Organizers:  
Ulrich Baur  
Sally Dawson  
Doreen Wackeroth

<http://quark.phy.bnl.gov/loopfest>

**LoopFest II**  
Radiative Corrections for the Linear Collider: SUSY, QCD, New Physics  
Brookhaven National  
Laboratory  
May 14 - 16, 2003

Organizers:  
Ulrich Baur  
Sally Dawson  
Doreen Wackeroth

<http://quark.phy.bnl.gov/loopfest2>  
email: [dow@ubpheno.physics.buffalo.edu](mailto:dow@ubpheno.physics.buffalo.edu)

**April 1 - 3, 2004** **LoopFest III**  
Radiative Corrections for the Linear Collider: Multi-loops and Multi-legs  
Kavli Institute for  
Theoretical Physics  
Santa Barbara

Organizers:  
Ulrich Baur  
Sally Dawson  
Michael Peskin  
Doreen Wackeroth

<http://quark.phy.bnl.gov/loopfest3>  
email: [dow@ubpheno.physics.buffalo.edu](mailto:dow@ubpheno.physics.buffalo.edu)

co-sponsored by BNL, KITP and SLAC

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LoopFest IV is sponsored by the American Linear Collider Physics Working Group on higher-order calculations at a future International Linear e+e-Collider (ILC). (<http://quark.phy.bnl.gov/lcwg/>)

*The LoopFest aims to provide a forum to coordinate activities focussed on the theoretical challenges resulting from the ultra-high experimental precision of a future ILC.*

### LoopFest IV - Topics

- The ILC potential for precision measurements and their role in searching for and disentangling physics beyond the SM.
- Progress in multi-loop and multi-leg calculations of SM and SUSY cross sections and new approaches (e.g., twistors).
- Automization of multi-loop and multi-leg calculations in the SM and beyond.
- Interfacing fixed higher-order calculations with multi-purpose event generators.

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Uriel Nauenberg

Mark Oreglia

Michael Peskin

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