HNINP (polish) node

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`Mid-Term Review Meeting`

`Durham, 9 April, 2002`

The aim is to summarize briefly on:

- Role of HNINP node within the network
- Contributions of HNINP team

Category	Name (gender)	Remarks
permanent staff	Stanisław Jadach (m)	HNINP (coordinator)
	Marek Jeżabek (m)	HNINP
	Maciej Skrzypek (m)	HNINP
	Elżbieta Richter-Wąs (f)	HNINP and Jagiel. University
	Zbigniew Wąs (m)	HNINP
	Wiesław Płaczek (m)	Jagiel. University
	Jan Kalinowski(m)	Warsaw Univ.
	Maria Krawczyk (m)	Warsaw Univ.
	Henryk Czyż (m)	Silesian Univ.
	Karol Kołodziej (m)	Silesian Univ.
	Marek Zrałek (m)	Silesian Univ.
present post-docs	Axel Hoefer	Young researcher, since 01.01.2002, came from Zeuthen (Zeuthen node)
pre-docs	Tomasz Pierzchala (m)	Silesian Univ.
	Malgorzata Worek (f)	Silesian Univ.

Collaboration of HNINP node with other nodes

Node [node number]	Joint publications (+joint workshop reports)	Milestones	Task areas
Granada [1]	0 (+3)	(3,5,7,8,11,13)	(i, ii, iv)
Demokritos [2]	0 (+1)	(3,5,7,8,11,13)	(i, ii, iv)
Durham [3]	0 (+3)	(3,5,6,7)	(i, ii, iv)
Karlsruhe [4]	3 (+3)	7,18,(6,8,11,13)	i, (ii, iv)
Lisbon [6]	0 (+0)	(3,5,7,8,11,13)	(i, ii, iv)
Montpellier [7]	0 (+3)	(3,5,7,11)	(ii, iv ,i)
KU Nijmegen [8]	0 (+1)	(3,5,7,13)	(i, ii, iv)
INFN [9]	0 (+1)	(8)	(ii)
Torino [10]	0 (+1)	(3,5,7,8,11,13)	(i, ii, iv)
Wien [11]	0 (+2)	(3,5,7,8,11,13)	(i, ii, iv)
PSI [12]	2 (+3)	3,5,6,7,(8,11,13)	i, ii, (iv)
DESY Zeuthen [13]	7 (+4)	3,5,6,7,12,13,14	i, ii, iv
all nodes	10 (+4)	3,5,6,7,8,11,13,14	

3. Electroweak corrections in e^+e^-
5. Triple and quartic gauge-boson couplings
6. Higher-order corrections to precision observables
7. Multi-particle production
8. Production of Higgs bosons
11. Top production and decay
12. Chargino and neutralino production at LHC and ELC
13. Corrections to SUSY particle production
14. FCNC and CP violation in SUSY models
18. New: b decays and CP violation

Work	Milestone	Task area	teams involved
Construction of (concurrent) Monte Carlo generator YFSWW3 and KORALW for 4-fermion production including electroweak corrections and QED exponentiation	3. Electroweak corrections to gauge boson pair production and $4f$ production at e^+e^- colliders 5. Improved phenomenology of and sensitivity to triple and quartic gauge-boson couplings	(i)	4,5,12,13
Exact differential and integral $\mathcal{O}(\alpha^2)$ results for $e^+e^- \to 2f$, including multiple real photons (exponentiation) and the case of $f = \nu$, implemented in KKMC event generator	6. Higher order electroweak and strong corrections to precision observables in the SM and MSSM 7. Improved evaluation of Multi-particle production	(i)	4,5,13
Complete theoretical analysis of the chargino and neutralino system (CP violation) in the supersymmetric models, with the emphasis on phenomenology of their production at e^+e^- colliders	13. Electromagnetic, electroweak and strong corrections to SUSY particle production and decays 14. FCNC and CP violation in supersymmetric models	(iv)	5,13

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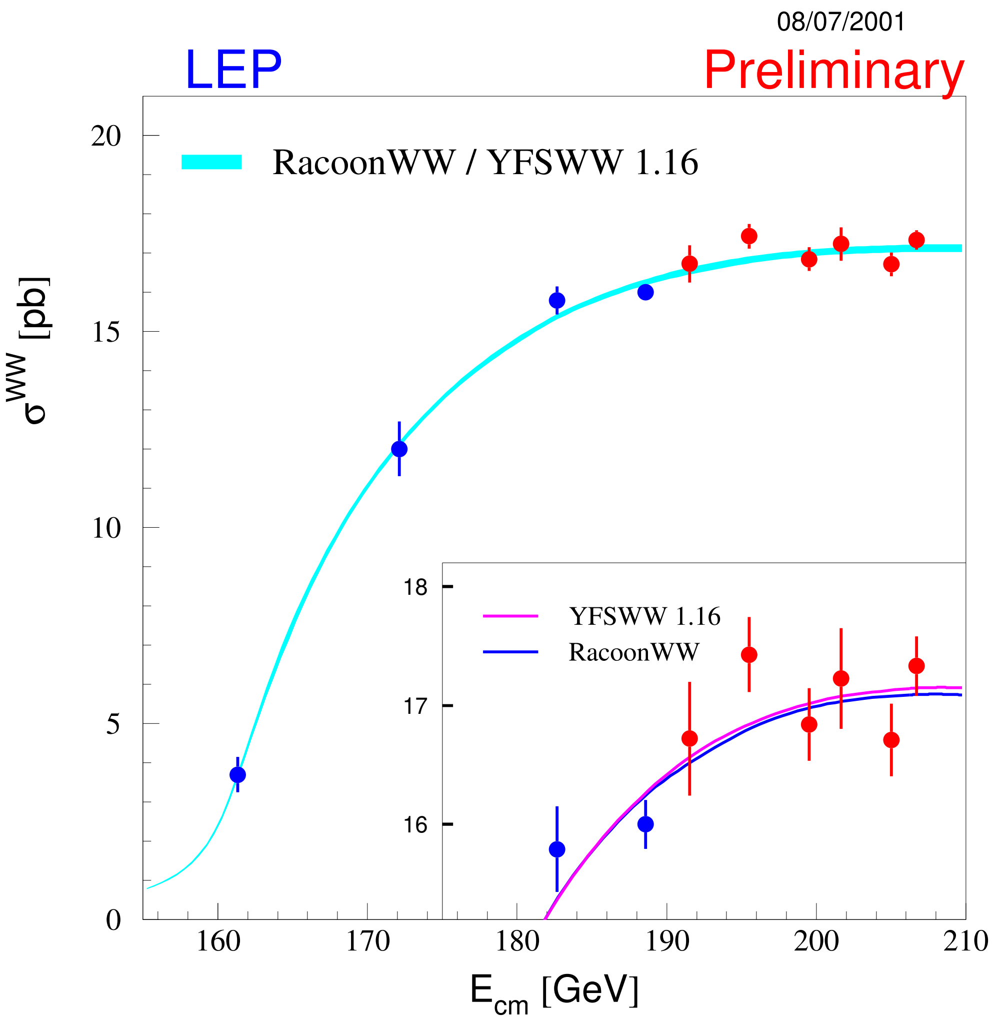

Agreement YFSWW/RacoonWW confirms non-universal electroweak corrections (2%)

Addressed Milestones

Mid-term milestones	Joint publications													
	1*	2*	8*	11	15	16	18	19	20	44*	55	56	57	58
3.	●		●			●			●					
5.	●		●											
6.					●			●						
7.	●						●	●	●					
8.	●	●	●											
11.		●							●					
12.			●							●	●	●	●	●
13.	●													
14.			●							●	●	●	●	●
new				●										

3. Electroweak corrections in e^+e^-
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new: b decays and CP violation

* joint workshop report

Joint publications

other nodes	Joint publications												
	1*	2*	8*	11	15	16	18	19	20	44*	55	56	57	58
1. Granada	●	●												
2. Democritos	●													
3. Durham	●		●							●				
4. Karlsruhe	●		●	●	●	●								
6. Lisbon														
7. Montpellier	●									●				
8. Nijmegen	●													
9. INFN Padova														
10. Torino	●													
11. Wien	●									●				
12. PSI	●		●			●		●						
13. DESY Zeuthen	●	●	●		●	●	●		●	●	●	●	●	

* joint workshop report