Hadronic pole cross-section Hadronic to leptonic width 41.559 ± 0.057 [1] ALEPH 20.729 ± 0.039 [1] ALEPH 41.578 ± 0.069 [2] **DELPHI** 20.730 ± 0.060 [2] DELPHI 41.535 ± 0.055 [3] 20.809 ± 0.060 [3] L3L3 41.501 ± 0.055 [4] OPAL 20.822 ± 0.044 [4] OPAL average 41.541 ± 0.037 average 20.767 ± 0.025 41.8 42 41.4 41.6 20.8 21 21.2 σ_{had}^0 [nb] Ratio $R_{\ell} = \Gamma_{had}/\Gamma_{\ell}$

Figure 1: Precision measurement of the hadronic pole cross-section of the ratio of the hadronic to leptonic width at LEP. The average value is from the PDG.

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References

- [1] R. Barate et al., "Measurement of the Z resonance parameters at LEP," Eur. Phys. J. C, vol. 14, pp. 1–50, 2000.
- [2] P. Abreu *et al.*, "Cross-sections and leptonic forward backward asymmetries from the Z0 running of LEP," *Eur. Phys. J. C*, vol. 16, pp. 371–405, 2000.
- [3] M. Acciarri et al., "Measurements of cross-sections and forward backward asymmetries at the Z resonance and determination of electroweak parameters," Eur. Phys. J. C, vol. 16, pp. 1–40, 2000.
- [4] G. Abbiendi *et al.*, "Precise determination of the Z resonance parameters at LEP: 'Zedometry'," *Eur. Phys. J. C*, vol. 19, pp. 587–651, 2001.