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Quantum Hall hierarchy revisited SUSANNE VIEFERS, JUHA SUORSA, University of Oslo, HANS HANSSON, MARIA HERMANNNS, Stockholm University — Using techniques from conformal field theory, we construct explicit candidate wave functions for the entire Abelian quantum Hall hierarchy, i.e. quasihole- and quasielectron condensates, as well as mixtures of these. The formalism presented here, generalizes and unifies our previous techniques, which were only able to address quasielectron condensates. In the special cases of the positive and negative Jain sequences $\nu = n/(2np \pm 1)$, our method exactly reproduces Jain's composite fermion wave functions. In general our results are consistent with Wen's topological classification of FQH states.

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