

# Intersection and union types in the $\overline{\lambda\mu\tilde{\mu}}$ -calculus

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The original  $\overline{\lambda\mu\tilde{\mu}}$  of Curien and Herbelin has a system of simple types, based on sequent calculus, embodying a Curry-Howard correspondence with classical logic. We introduce and discuss three type assignment systems that are extensions of  $\overline{\lambda\mu\tilde{\mu}}$  with intersection and union types. The intrinsic symmetry in the  $\overline{\lambda\mu\tilde{\mu}}$  calculus leads to an essential use of both intersection and union types.