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Simp[ε_] := Simplify[ε];
CF[ε_] :=
  ε /. λ_β | λ_a | λ_δβ | λ_δa | λ_δaa | λ_c | λ_ao | λ_ca | λ_aao =>
    MapAt[Simp, λ, 1];
AutoCollecting[λ_] := (λ /: λ[0, ___] = 0;
  λ /: λ[f_, r___] + λ[g_, r___] := λ[Simp[f + g], r];
  λ /: g_ * λ[f_, r___] := λ[Simp[g f], r]);
AutoCollecting /@ {β, a, δβ, δa, δaa, c, ao, ca, aao};
UU /: UU[x_] + UU[y_] := UU[x + y];
UU /: a_ * UU[x_] := UU[Expand[a x]];
UU /: D[u_UU, vs__] :=
  CF[u /. λ_β | λ_a | λ_δβ | λ_δa | λ_δaa =>
    MapAt[D[#, vs] &, λ, 1]];
b_φ = 1;
γa[f_, j_, k_, l_, m_] :=
  δaa[f, j, k, l, m] - δaa[b_j f, φ, k, l, m];
hb[f_, i_, j_, k_] := a[b_j f, i, k] - a[b_i f, j, k]
  (*=f[a_ik, a_jk]*) ;
δhb[f_, i_, j_, k_] := δa[b_j f, i, k] - δa[b_i f, j, k];
δtb[f_, x_, j_, l_] := δaa[f, φ, l, x, j] - δaa[f, φ, j, x, l];
UU /: Coefficient[u_UU, λ_[js___]] :=
  Total[Cases[u, λ[f_, js] => f, ∞]];
Kδ /: Kδ_is__ := KroneckerDelta[1, Length[Union[{is}]]];

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