

## Notes on the GSW function `gsw_SA_from_rho(rho, t, p)`

This function, `gsw_SA_from_rho` calculates (using a modified Newton-Raphson iteration procedure) the Absolute Salinity  $S_A$  corresponding to the input values of in situ density, in situ temperature and pressure. Note that the density input is not density anomaly, that is, it has not had  $1000 \text{ kg m}^{-3}$  subtracted from it. One use for this function is in the laboratory where a measured value of the in situ density  $\rho$  of a seawater sample may have been made at the laboratory temperature  $t$  and at atmospheric pressure  $p$ . The present function will return the Absolute Salinity  $S_A$  of this seawater sample.