

Problem of the Week – 12

In Problem Set 6, we defined $\text{PCP}_\varepsilon(r(n), q(n))$ as the set of languages that have a PCP protocol using $O(r(n))$ random bits and $O(q(n))$ queries to achieve soundness error ε (there is no error with respect to completeness).

- What is the set $\text{PCP}_0(\log n, \text{poly}(n))$?
- What is the set $\text{PCP}_{2^{-n}}(\log n, \text{poly}(n))$?
- What is the set $\text{PCP}_{1/2}(\log n, \text{poly}(n))$?