Multicolor Ramsey number for the loose 3-path of length three

Let $P_3^3$ be the 3-uniform hypergraph with the set of vertices \{a, b, c, d, e, f, g\} and the set of edges \{\{a, b, c\}, \{c, d, e\}, \{e, f, g\}\}. The Ramsey number $R(P_3^3; n)$ is the smallest integer $N$ such that any coloring of the edges of the complete 3-uniform hypergraph $K^3_N$ on $N$ vertices with $n$ colors leads to a monochromatic copy of $P_3^3$. We show that

$$R(P_3^3; n) \leq \lambda_0 n + 7\sqrt{n},$$

for some explicit constant $\lambda_0 = 1.97466\ldots$.

This is joint work with Tomasz Łuczak.