Keypoints of GRH implies GWC

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Generalized Riemann Hypothesis: All natural zeros of all Dirichlet L-functions have real point equal to 1/2.

Theorem: (Deshouillers, Effinger, te Riele, Zinoviev)
Assume the GRH, every odd number greater than 5 can be expressed as a sum of three prime numbers.

Theorem (Zinoviev) Assuming the GRH, every odd number greater than 10^20 is a sum of three prime numbers.

Lemma: For any $\alpha \in E_1^{''} \bigcup E_2$, and for any $N > 10^{20}$ (not necessarily odd), GRH implies that $\left|S(\alpha)\right| < 0.18N / \log(N)$

Lemma: If the GRH holds and if $6 \leq n \leq 10^{20}$, then there exists a prime number p such that $4 \leq n - p \leq 1.615 * 10^{12}$

Theorem (Deshouillers, te Riele) : Every even number $4 \leq n \leq 10^{13}$ is a sum of three prime numbers.