- In 2008: Aumasson et al. reported different attacks on Salsa and ChaCha Cipher with complexity:
  - a 2^251 on Salsa20/8,
  - a 2^248 on ChaCha7,
  - a 2^151 on Salsa20/7, and
  - a 2^139 on ChaCha6.

In this the authors introduced the concept of Probabilistic Neutral Bits (PNBs). Using this idea authors divided the key bits into two types *significant key bits* and *non-significant key bits* based on the amount of influence which each bit of the key has on the output function.

- In 2012: Shi et al. reported an attack on Salsa and ChaCha by improving the time complexity
  - by 2^2 on Salsa20/8 reducing the time complexity to 2^250
  - by 2^1.5 ChaCha7 reducing the time complexity to 2^246.5,
  - by 2^3 Salsa20/7 (time complexity is 2^148)
  - by 2^3 on ChaCha6 (time complexity is 2^136).

The authors introduced the concept of Column Chaining Distinguisher.

- In 2015: Maitra et al. reported an improvement of
  - 2^2.8 on Salsa20/8 reducing the time complexity to 2^247.2.
  -
- In 2015: Maitra further improved the time complexity
  - on Salsa20/8 by 2^1.7 reducing the time complexity to 2^245.5 and
  - on ChaCha7 by 2^7.5 reducing the time complexity to 2^239.

In this the author introduced the idea of choosing proper Initialization vector (IV) corresponding to the keys.

- In 2016: Choudhuri et al. improved the time complexity
  - to 2^244 on Salsa20/8,
  - to 2^233 on ChaCha7,
  - to 2^137 on Salsa20/7,
  - to 2^127.5 on ChaCha6, and
  - to 2^32 on Salsa20/6.

The authors provided the extension of suitable single-bit differentials with linear approximations, which is essentially a differential-linear attack.

- In 2017: Dey et al. reduced the complexity to
  - 2^243.67 on Salsa20/8, and
  - 2^235.22 on ChaCha7.

In this author provided the improved algorithm to find probabilistic neutral bits.

- In 2019: Dey et al. reduced the complexity to
  - 2^243.23 on Salsa20/8, and
  - 2^234.78 on ChaCha7.

- In 2020: Coutinho et al. reduced the complexity to
  - to 2^102 on ChaCha6,
  - to 2^231.9 on ChaCha7.

The authors provided the new linear approximation for the ChaCha cipher.

- In 2020: Beierle et al. improved the time complexity
  - to 2^77.4 on ChaCha6, and
  - to 2^230.86 on ChaCha7.

In this they discovered a single bit distinguisher in the 3.5 round of ChaCha.

- In 2021: Coutinho et al improved the time complexity
  - on ChaCha6 by 2^26.4 reducing the time complexity to 2^51.
  - on ChaCha7 by 2^6.86 reducing the time complexity to 2^224.
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- In 2021: Dey et al. re-analyzed the attack by Coutinho et al. and concluded that the time complexity is 2^232.83 for ChaCha7.

- In 2022: Dey et al. reported
  - a 2^81.58-time complexity attack on ChaCha6 with a 128-bit key,
  - a 2^123.04-time complexity attack on 6.5 rounds with a 128-bit key, and
  - a 2^221.95-time complexity attack on ChaCha7.

In this author portioned the key bits into memory and non-memory key bits.

- In 2022: Coutinho et al. reported
  - a 2^214 distinguishing attack on ChaCha7,
  - a 2^215.62 key recovery attack on Salsa20/8, and
  - a 2^217.62 distinguishing attack on Salsa20/8.
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- In 2023: Dey et al. reported
    - a 2^99.48-time complexity attack on ChaCha6,

    The authors claimed that the previous attacks on 6 rounds from 2008, 2012, 2016, 2016, 2016, 2020, 2020 used 2^147, 2^139, 2^159, 2^161, 2^166, 2^210, 2^212 operations (to search for probabilistic neutral bits) rather than the reported 2^139, 2^136, 2^131.40, 2^129.53, 2^127.5, 2^102.2, 2^104.68 operations.