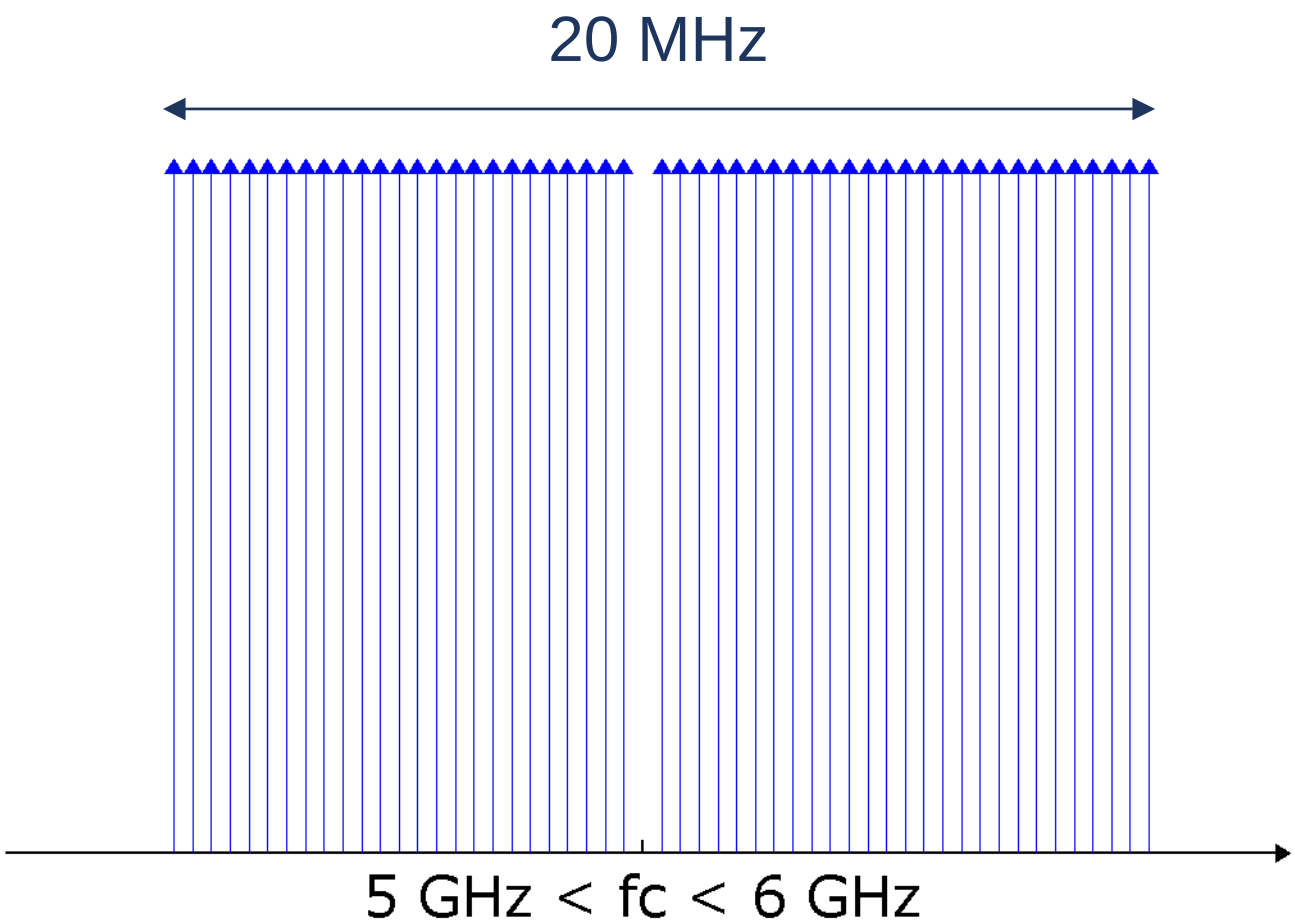
Modern communication systems use multitone signals

e.g. 5 GHz WLAN



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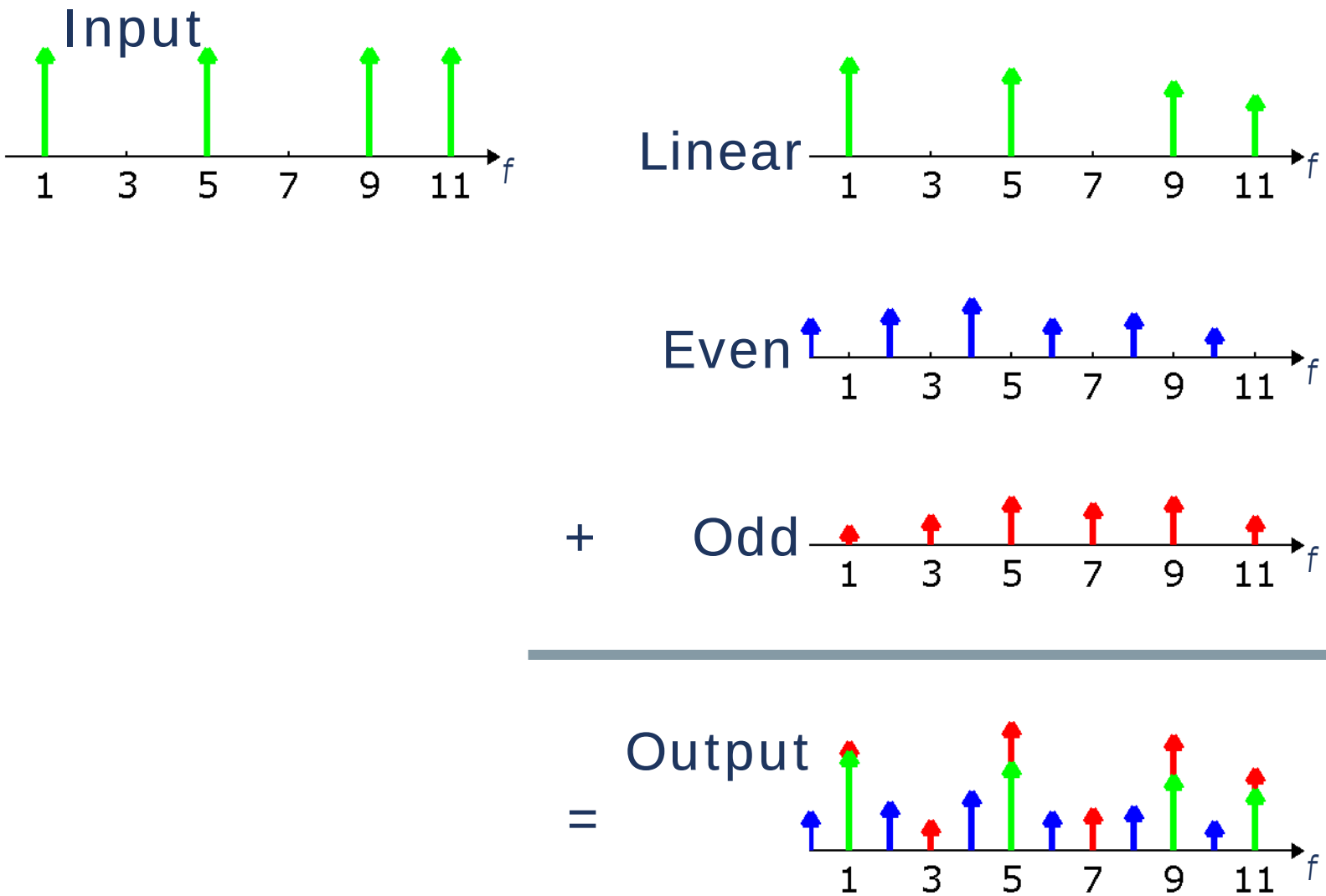
Multisine signals with detection lines describe (non)linear behavior easily



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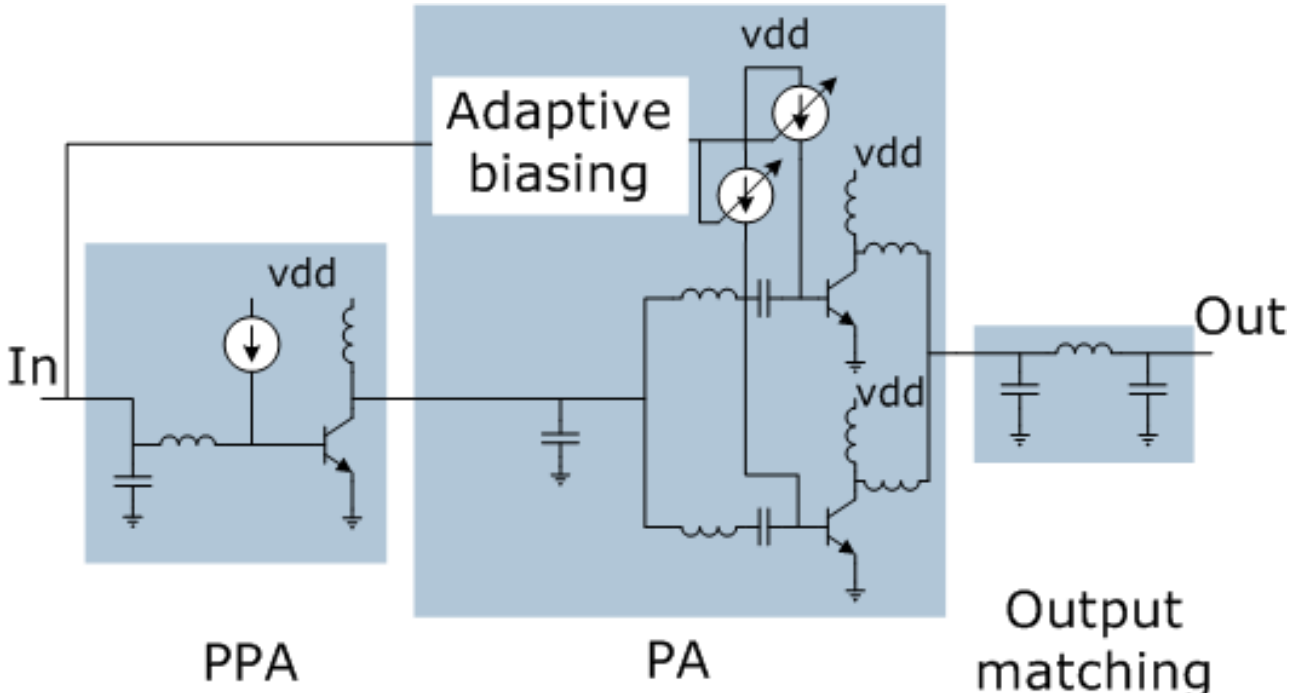
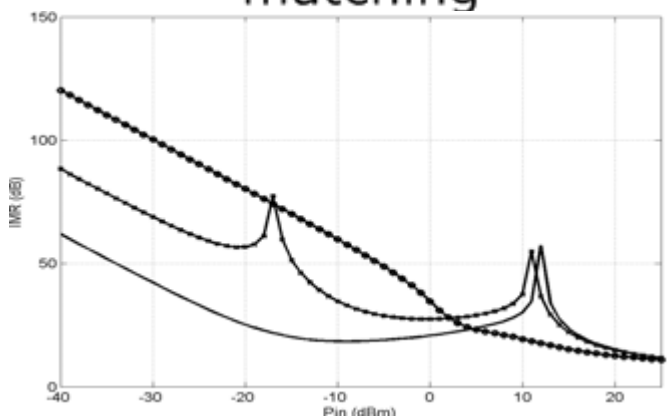
Traditional techniques fail to analyze a 5 GHz WLAN power amplifier



‘Sweet spots’ vary dramatically with the biasing

⇒ with the used input signal



From P.Colantonio et al.

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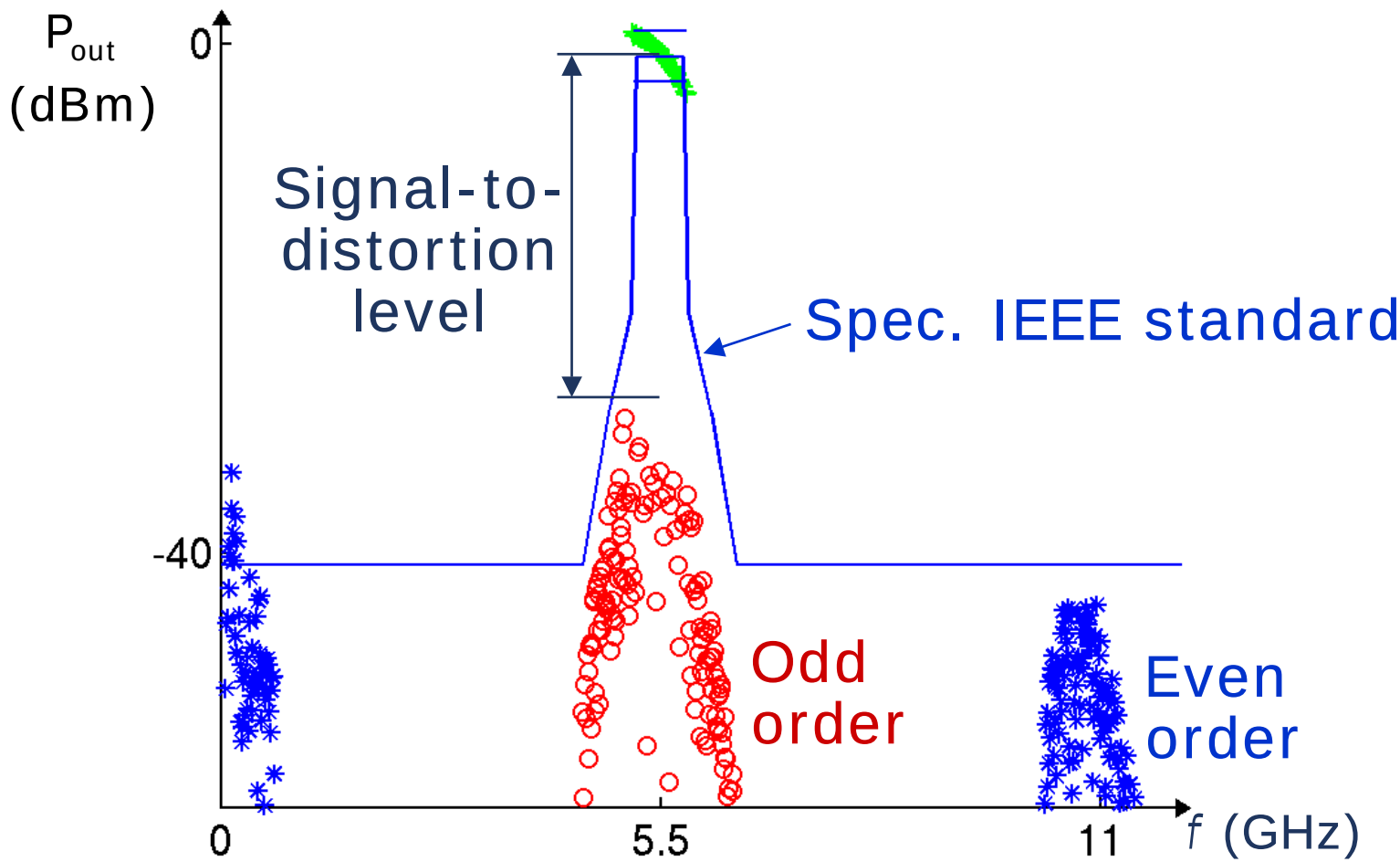
A simulation with a multisine enables direct comparison with specifications



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Multitone signals sufficient to emulate signals in applications

They closely resemble the actual signal

They deliver useful information in circuit analysis

They can be used to retrieve system-level models

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