Results from divertor experiments at W7-X

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- Wendelstein 7-X demonstrated that island divertor is an attractive exhaust concept.
- In attached state
 - We can efficiently spread heat with wetted area of up to 1.5 m² Moreover it increases with P_{SOL}.
 - Overloading divertor leading edge showed that plasma core is robust against impurity accumulation.
- En-route to detachment we observed higher recycling regime. This has been enabled by good separation of counter-streaming flows in the island divertor.
- Stable (≤ 26 s), complete detachment in many scenarios was achieved



