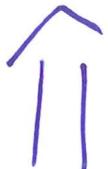# Theorems 4.5.4 and 4.5.5
Ingredients which enter it.

The theorem follows
from Abelsummability
of functions in $L'(\Pi)$
(theorem 4.5.1)

⇑

To prove 4.5.1, one
needs properties of
Poisson kernel (4.4.1)

⇑

Poisson kernel serves
to write an Abel sum
in a compact way via
a convolution

$$f * P_r(t) = \sum r^{|n|} \hat{f}(n) e^{int}$$

⇑

Abel summation **for us**
is a concept that serves
two purposes. 1)"make sense
out of a series that does not
converge in the regular sense",
2) a technique to prove 4.5.4./4.5.5.