



DATE: 27th August 2016 TIME: 9:00 – 10:15

LOCATION: Osservatorio Astronomico di Asiago, via dell'Osservatorio, 8; Asiago, Vicenza

Cocaine: from dependence to addiction, from optogenetic to rTMS The brain disease model of cocaine addiction.

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ABSTRACT

Physical **dependence** refers to how the body experiences physiological adaptation in response to chronic use of a substance. Most animals adapt to having these substances in their system and will suffer negative consequences if the substance intake is stopped abruptly – these are referred to as withdrawal symptoms.

It differs from addiction because it is a physiological state and not a dysfunctional behavioural syndrome.

Addiction can be defined as the compulsive use of substances (usually drugs for non-medical reasons) in combination with a dysfunctional behavioural syndrome of the user. It would be correct to say that most addicted people will have developed a physical dependence on their drug.

Optogenetics. A new revolutionary technique to sensibilise and stimulate neuron cells with light.

rTMS an old technique with a new application.

FURTHER READINGS

Will be provided during the lecture.